Santa Monica Mountains National Recreation Area

ANTHONY C. BEILENSON VISITOR CENTER

at King Gillette Ranch

Environmental Assessment

February, 2010



Cover Picture from University of Tennessee, Knoxville, Special Collections Library Clarence Brown Collection. Stable Building and Trellis at King Gillette Ranch, c.irca1940.



United States Department of the Interior

NATIONAL PARK SERVICE Santa Monica Mountains National Recreation Area 401 West Hillcrest Drive Thousand Oaks, California 91360-4207

In reply refer to: L76 (SAMO/126-72)

Dear Reviewer:

The vision to establish an environmental and cultural education center at King Gillette Ranch in the geographic heart of the Santa Monica Mountains National Recreation Area (SMMNRA) has been discussed for many years. Implementing part of this vision by establishing a full-service visitor center at King Gillette Ranch is now within our grasp. The National Park Service at SMMNRA has prepared this Environmental Assessment (EA) for the proposed construction and operation of the Anthony C. Beilenson Visitor Center at King Gillette Ranch.

We are seeking your comments on the project and the analysis presented in this document. The EA is available now for a 30-day public review and comment period. This comment period ends at midnight on March 15, 2010.

Written comments may be submitted in one of four ways:

- By mail: Superintendent Woody Smeck Santa Monica Mountains National Recreation Area 401 West Hillcrest Dr. Thousand Oaks, CA 91360
- Email: SAMO_KGR_Planning@nps.gov
- On-line through the NPS Planning Website: <u>http://parkplanning.nps.gov/samo</u>
- via FAX: (805) 370-1850

For more information concerning this EA, please contact Melanie Beck, Outdoor Recreation Planner, at (805) 370-2346.

Thank you for your continued interest in the future of Santa Monica Mountains National Recreation Area.

Sincerely,

Woody Smew

Woody Smeck Superintendent

Please note that the names and addresses of people who comment become part of the public record. If you wish for the National Park Service to withhold your name and/or address, you must state this prominently at the beginning of your comment. The National Park Service will make all submissions from organizations, from businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses available for public inspection in their entirety. Intentionally Blank

Anthony C. Beilenson Visitor Center at King Gillette Ranch Environmental Assessment February 2010

Santa Monica Mountains National Recreation Area

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Anthony C. Beilenson Visitor Center at King Gillette Ranch

Executive Summary

Santa Monica Mountains National Recreation Area (SMMNRA) extends approximately 44 miles along the southern California coastline in Los Angeles and Ventura Counties. The SMMNRA encompasses more than 150,000 acres and is jointly managed by the National Park Service, California Department of Parks and Recreation, the Santa Monica Mountains Conservancy, and the Mountains Recreation and Conservation Authority. As the nation's largest urban national recreation area, SMMNRA is surrounded by urban development that supports a population of approximately 17 million.

King Gillette Ranch (the Ranch) is a 588-acre public park site located in the center of the SMMNRA, bounded by Mulholland Highway on the north and Las Virgenes Road on the west. The Ranch's central location, combined with the diverse resources and scenic setting, provides accessible open space and park opportunities at the urban interface of the greater Los Angeles metropolitan area. Because of its location and unique setting, the Ranch is ideally situated to serve as the site for a full-service visitor center serving all of SMMNRA.

The National Park Service, in coordination with the partner agencies, is proposing to construct an interagency visitor center at King Gillette Ranch. Approximately 18 acres in the northwestern corner of the Ranch would be associated with the construction and future operation of the visitor center. The original Stable building would be modified to serve as a visitor center, and the surrounding area would be redeveloped for parking, restrooms, storage, and other ancillary visitor center operational needs.

The 2002 SMMNRA General Management Plan prescribed a future administrative, environmental, and cultural education center at King Gillette Ranch. A component of the center would be a visitor center to be jointly operated by the National Park Service, California Department of Parks and Recreation, the Santa Monica Mountains Conservancy and Mountains Recreation and Conservation Authority. Therefore, the Environmental Assessment examines two alternatives in detail: A) no action, and B) the preferred alternative, which is to modify the existing Stable building to serve as a full-service visitor center and to construct two small buildings nearby, a restroom and a multi-purpose visitor building, to create a visitor services plaza. In addition, the project would widen the entry gate and entrance road and construct parking for 50 vehicles.

Topics considered in the analysis include: accessibility for individuals with disabilities, aesthetics, air quality, archaeological and ethnographic resources, energy use and sustainability, land use, park operations, public health and safety, soils, traffic and transportation, utilities and service systems, vegetation, visitor experience, water resources, and wildlife. Each topic includes a section describing the affected environment, i.e. resources that may potentially be affected by the project, and an environmental consequences section analyzing the potential impacts to those resources.

Among other benefits, the construction of the visitor center would improve the visitor experience, public safety and accessibility for people with disabilities. The new visitor center would improve energy

efficiency as a showcase of sustainability. The preferred alternative would have minor impacts on traffic. The alternatives analyzed in this Environmental Assessment would not result in major environmental impacts or impairment to park resources or values.

This document will be available for a 30-day public review period. Comments will be documented and analyzed at the close of the public review period. If no significant impacts from the proposed project are identified, the information in the EA together with insights gained from the public comment and other agency review will then be used to prepare a Finding of No Significant Impact (FONSI), which will be sent to the NPS Pacific West Regional Director for consideration.

Table of Contents

1.0	PURPOSE AND NEED FOR FEDERAL ACTION	I
1.1	Introduction and Scope of Environmental Assessment	I
1.2	Description of the Project Area	4
I.3 Purpose		6
1.4	Need	6
1.5	Planning Context	7
١.5.	I SMMNRA General Management Plan	7
1.5.2		8
1.6	Project Objectives	9
1.7	Issues and Impact Topics	10
I.7.	I Project Planning and Internal Scoping	10
1.7.2	2 Public Scoping	10
1.7.3	3 Issues	12
1.7.4	4 Impact Topics Analyzed	13
1.7.	5 Topics Dismissed	15
2.0	ALTERNATIVES	18
2.1	Alternative A: No Action	18
2.1.	I Visitor Services Management	18
2.1.2	2 Park Operations	18
2.1.3	3 Buildings	19
2.1.4	4 Circulation	19
2.1.5	5 Programs	20
2.1.6	6 Informal Recreational Visitation	21
2.1.7	7 Special Use Permits	21
2.2	Alternative B: Preferred Alternative	22
2.2.	I Visitor Services Management	22
2.2.2	2 Park Operations	22
2.2.3	3 Buildings	22
2.2.4	-	28
2.2.5	5 Programs	28
2.2.6	5	29
2.2.7	7 Special Use Permits	29
2.3	Environmentally Preferred Alternative	29

2.4	Alternatives Considered but Dismissed	31
2.4. I	Alternative Visitor Center Locations	32
2.4.2	Alternative Circulation Options	32
2.4.3	Alternative Parking Options	33
2.4.4	Alternative Use of Ancillary Structures	33
2.4.5	Alternative to Use Land and Facilities for Equestrian Uses	34

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES 46

3.1	Methodology	46
3.1.	Impact Descriptors	47
3.1.2	Resource Protection Measures	59
3.1.3	National Park Service Prohibition of Impairment of Park Resources And Values	81
3.2	Impact Analysis	81
3.2.	ACCESSIBILITY FOR INDIVIDUALS WITH DISABILITIES	81
3.2.2	AESTHETICS	84
3.2.3	AIR QUALITY	89
3.2.4	ARCHAEOLOGICAL AND ETHNOGRAPHIC RESOURCES	92
3.2.5	ENERGY USE, CONSERVATION POTENTIAL, AND SUSTAINABLE DESIGN	98
3.2.6	5 LAND USE	102
3.2.7	PARK OPERATIONS	105
3.2.8	B PUBLIC HEALTH AND SAFETY	107
3.2.9	SOILS	115
3.2.	0 TRAFFIC AND TRANSPORTATION	120
3.2.	I UTILITIES AND SERVICE SYSTEMS	129
3.2.	2 VEGETATION	132
3.2.	3 VISITOR USE AND EXPERIENCE	138
3.2.	4 WATER RESOURCES	142
3.2.	5 WILDLIFE, AND THREATENED, ENDANGERED, AND OTHER SENSITIVE SPECIES	146
4.0	CONSULTATION AND COORDINATION	156
4.1	Public Scoping	156
4.2	Agency Consultation	156
4.3	List of Recipients	159
4.4	List of Preparers, Consultants, and Planning Team Members	159
5.0	REFERENCES AND ACRONYMS	161
Refer	ences	161

APPENDICES

Figures

١.	Regional Setting—Santa Monica Mountains National Recreation Area	2
2.	Vicinity Map – King Gillette Ranch within Santa Monica Mountains National Recreation Area	3
3.	King Gillette Ranch	4
4.	Visitor Center Project Planning Area	5
5.	No Action Alternative—King Gillette Ranch Existing Facilities	19
6.	Preferred Alternative—Proposed Visitor Center Facilities	23
7.	Preferred Alternative—Proposed Visitor Center Services Area	24
8.	Preferred Alternative—Proposed Visitor Center East and South Elevations	25
9.	King Gillette Ranch Landscape Overview	85
10.	Malibu Land Use Plan—Land Use Designation for Project Planning Area	103
11.	Soil Associations Within and Adjacent to Project Planning Area	116
12.	Vegetation Communities Within and Adjacent to Project Planning Area	134
13.	Proposed Restoration Areas	138

Tables

١.	Alternatives — Comparison of Actions	35
2.	Alternatives — Compatibility with Project Objectives	38
3.	Alternatives — Impact Summary	44
4.	Impact Intensity Thresholds	48
5.	Resource Protection Measures	60
6.	Soil Associations Within and Adjacent to Project Planning Area	116
7.	Traffic Analysis Levels of Service for King Gilette Ranch Design Concept Plan	125

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1.0 PURPOSE AND NEED FOR FEDERAL ACTION

1.1 Introduction and Scope of Environmental Assessment

Santa Monica Mountains National Recreation Area (SMMNRA) was established by Congress in 1978 to protect the largest expanse of mainland Mediterranean ecosystem in the national park system and to provide for the recreational and educational needs of the visiting public (Public Law 95-625). SMMNRA's 153,250 acres extend approximately 44 miles along the southern California coastline in Los Angeles and Ventura Counties (Figure 1). The land base encompasses mountains, canyons, valleys, and beaches within and adjacent to unincorporated Los Angeles and Ventura Counties and the Cities of Agoura Hills, Calabasas, Los Angeles, Malibu, Thousand Oaks, Westlake Village, and others. SMMNRA contains a wide variety of natural and cultural resources jointly managed by the National Park Service, California Department of Parks and Recreation, the Santa Monica Mountains Conservancy, and the Mountains Recreation and Conservation Authority—collectively referred to as the partner agencies. As the nation's largest urban national recreation area, SMMNRA is surrounded by urban development that supports a population of approximately 17 million.

The following mission statement was crafted in 1997 cooperatively among the National Park Service, California State Parks, and the Santa Monica Mountains Conservancy to guide the formation of goals, objectives, projects, and management strategies reflected in the current SMMNRA General Management Plan (GMP) (NPS 2002).

The mission of the Santa Monica Mountains National Recreation Area is to protect and enhance, on a sustainable basis, one of the world's last remaining examples of a Mediterranean ecosystem and to maintain the area's unique natural, cultural and scenic resources, unimpaired for future generations. The SMMNRA is to provide an inter-linking system of parklands and open space that offer compatible recreation and education opportunities that are accessible to a diverse public. This is accomplished by an innovative federal, state, local, and private partnership that enhances the region's quality of life and provides a model for other parks challenged by urbanization.

The Mediterranean ecosystem is characterized by mild, wet winters and hot, dry summers. Twenty-six distinct natural plant communities comprise this ecosystem, including freshwater aquatic habitats, oak woodlands, chaparral, and two of the few remaining salt marshes on the Pacific Coast. Over 450 vertebrate animal species and nearly 1,200 vascular plant species occur in the SMMNRA, including 33 federal and state-listed threatened and endangered plants and animals. Mediterranean ecosystems are among rarest and most endangered on earth, owing to the limited extent of such ecosystems and the high desirability for human occupation since prehistoric time; SMMNRA also features over 1,000 archeological sites and numerous culturally and historically significant structures.

True to the namesake of the park, there is a great diversity of recreational opportunities in SMMNRA, including the 500-mile recreational trail network and the nearly 1,800 partner agency-led interpretive and educational programs per year. Annual visitation to the SMMNRA is approximately 33 million, many of whom visit the coastal public beaches, along with visitors using the recreational trail network and participating in park educational programs.



Figure I. Regional Setting-Santa Monica Mountains National Recreation Area

King Gillette Ranch (the Ranch) is a 588-acre public park site located in the center of the SMMNRA (Figure 2), bounded by Mulholland Highway on the north and east, Las Virgenes Road on the west, and generally, Las Virgenes Canyon Road along the southern boundary. The Ranch lies within the Malibu Creek Watershed, the second largest watershed within the greater Santa Monica Bay Watershed. The majority of the Ranch property, approximately 322 acres, is undeveloped open space with rich natural

and cultural resources. Fifty-nine acres of the Ranch is developed with structures and landscaping from the original estate of razor magnate King Camp Gillette. The Ranch's central location, combined with the diverse resources and scenic setting, provides accessible open space and park opportunities at the urban interface of the greater Los Angeles metropolitan area.

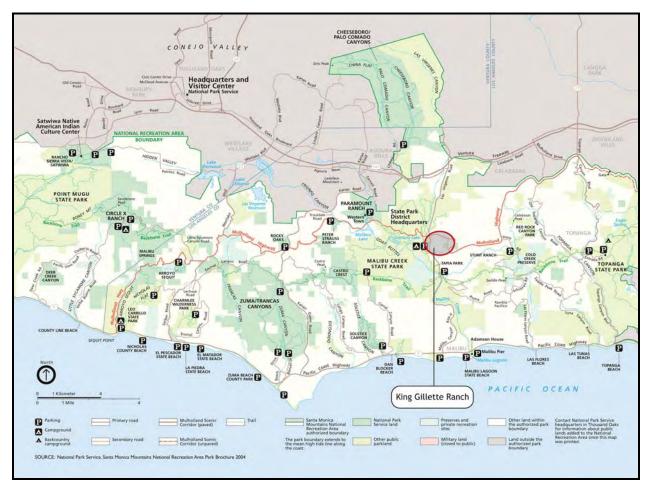


Figure 2. Vicinity Map – King Gillette Ranch Location within Santa Monica Mountains National Recreation Area

The National Park Service, in coordination with California Department of Parks and Recreation and the Mountains Recreation and Conservation Authority, is proposing to construct an interagency visitor center (Visitor Center) at King Gillette Ranch. Approximately 18 acres in the northwestern corner of the Ranch would be associated with the construction and future operation of the visitor center. The original Stable building would be modified to serve as a visitor center, and the surrounding area would be redeveloped for parking, restrooms, storage, and other ancillary visitor center operational needs.

This Environmental Assessment (EA) describes the proposed actions associated with construction and operation of the Visitor Center and analyzes the associated potential environmental impacts in accordance with the National Environmental Policy Act of 1969, as amended (NEPA); regulations of the Council on Environmental Quality (40 *Code of Federal Regulations* (CFR) Sec. 1508.9); National Park Service Management Policies (2006); National Park Service Director's Order – 12: *Conservation Planning*,

Environmental Impact Analysis, and Decision-making; the National Historic Preservation Act of 1966, as amended (NHPA); the Endangered Species Act of 1973, as amended; and the Federal Coastal Zone Management Act of 1972.

I.2 Description of the Project Area

King Gillette Ranch is located on the northern side of the Santa Monica Mountains in a broad valley approximately five miles southwest of Calabasas in unincorporated Los Angeles County. The Ranch lies

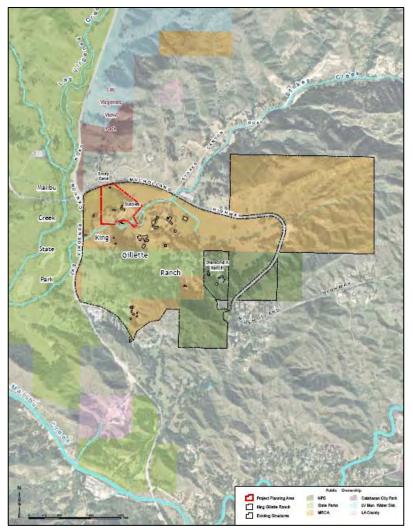


Figure 3. King Gillette Ranch

at the southeastern corner of the Las Virgenes Road and Mulholland Highway intersection (Figure 3). The immediate project vicinity is generally characterized by parkland and low density rural residential development with large open spaces consisting of valleys, hills and ridgelines, and riparian corridors supporting oak woodland, coastal sage scrub, chaparral, riparian and native and annual grasslands.

The Visitor Center project planning area for this EA covers approximately 18 acres in the northeastern area of the Ranch where the original Stable building and entrance road are located (Figure 4. Visitor Center Project Planning Area).

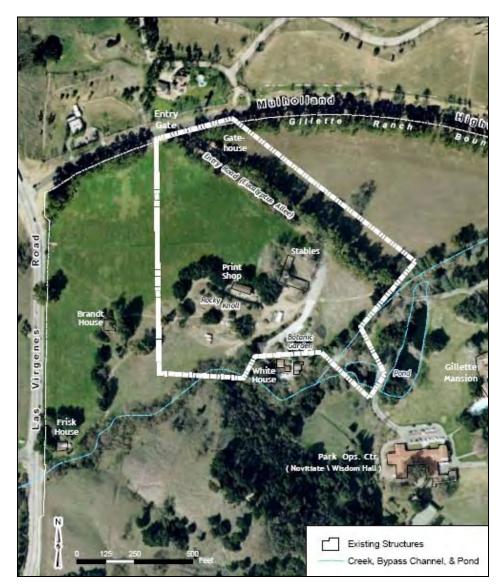


Figure 4. Visitor Center Project Planning Area

The Ranch has a long and complex history of use and development dating to early use by the Chumash, through the era of Missions, Spanish land grants, estate development in the 1920s and 1930s, and various non-profit and private owners up to the present. The Ranch was purchased in 2005 by the National Park Service, California Department of Parks and Recreation, the Santa Monica Mountains Conservancy and the Mountains Recreation Conservation Authority, with additional contributions from several other public agencies and private organizations. Soka University vacated the property in the summer of 2007, at which time the property transitioned to a public recreation area supporting limited public access, recreation, and associated administrative uses. Land ownership and management within King Gillette Ranch currently includes federal and state agencies. The park is owned and cooperatively managed by

the National Park Service, California Department of Parks and Recreation, the Santa Monica Mountains Conservancy and the Mountains Recreation Conservation Authority.

There are a number of permanent structures on the Ranch property that were built between 1927 and 1989 and are clustered primarily in the 59-acre developed area the property. Historic documentation indicates that Gillette used approximately 320 acres of the estate in the north and western portions of the property as a working ranch

and for agricultural purposes including growing hay, grazing livestock, fruit production and orchards. Agricultural activities continued on the Ranch until the mid-1950s.



Stable Building at King Gillette Ranch, circa 1940. University of Tennessee, Knoxville, Special Collections Library, Clarence Brown Collection.

Of the previously described historic uses at the Ranch, the

18-acre project planning area includes the Stable building—one of the original structures constructed in 1928 for the original King Camp Gillette residence, the "Eucalyptus Allée" entrance road, and a portion of the fields north, south, and west of the Stable building historically used for agricultural purposes.

I.3 Purpose

Purpose is the overarching goal(s) the project would meet. The purpose of the proposed Visitor Center at King Gillette Ranch is to provide a centrally located, full-service visitor center to meet the growing need for visitor orientation to the SMMNRA and environmental education programs for the growing population of the greater Los Angeles metropolitan area. To that end, this EA intends to identify and evaluate a LEED-certified SMMNRA full-service visitor center.

I.4 Need

Need is a statement of why the action is necessary. Currently, there exists no central and easily accessible resource for guiding visitor experiences at the SMMNRA. Although the SMMNRA provides many unique, quality, educational and recreational facilities for visitors, there has been no full-service gateway visitor center to provide park orientation and education programs typical of a national park unit. Throughout the 31-year history of the SMMNRA, the main visitor center has always been located outside the actual legislative boundary of the park. Presently, the majority of visitors must drive to the visitor center at the National Park Service's headquarters in Thousand Oaks, located at the western end of the Santa Monica—a particularly inefficient path of travel from the Los Angeles region, where the majority of regional visitors live. Absent a readily accessible, physical visitor center, orientation to the SMMNRA tends to occur on an ad hoc basis. Visitors find information at ranger and contact stations at individual park sites with varying hours of operation. The efficiency, extent, and overall quality of the visitor experience are decreased.

King Gillette Ranch is the ideally situated gateway location for accessibility from the greater Los Angeles region. The site is in the heart of the SMMNRA, yet quickly accessed from the Los Angeles region from either Highway 101 or Pacific Coast Highway. The Stable building location within the Ranch would provide a visitor center facility of aesthetic value and local culture and historical interest.

The interagency management proposal to construct the visitor center is based on actions and mission goals prescribed in the SMMNRA GMP. In follow-up to the GMP's prescriptions, a joint vision statement for King Gillette Ranch was crafted by the National Park Service, California State Parks, Santa Monica Mountains Conservancy, and the Mountains Recreation Conservation Authority.

I.5 Planning Context

1.5.1 SMMNRA General Management Plan

The current National Park Service General Management Plan (GMP) Environmental Impact Statement for the Santa Monica Mountains National Recreation Area (NPS 2002) was prepared in cooperation with California Department of Parks and Recreation and the Santa Monica Mountains Conservancy. The 2002 GMP prescribed a future administrative, environmental, and cultural education center at King Gillette Ranch to be jointly operated by the National Park Service, California Department of Parks and Recreation, the Santa Monica Mountains Conservancy and Mountains Recreation and Conservation Authority. The GMP's prescription for the joint facility was carried over from the original 1982 GMP.

In addition to prescribing a joint administrative, environmental, and cultural education center at King Gillette Ranch, the 2002 GMP includes the following goals.

- Make the NPS, CSP, and SMMC built environments work in harmony with the natural environment. Use aesthetically pleasing and compatible design principles.
- Apply sustainable design to minimize the short and long-term environmental impacts of NPS, CSP, and SMMC development. Use resource conservation, recycling, waste minimization, and energy-efficient and ecologically responsible materials and techniques for construction when feasible.
- Protect and restore native plant species and plant communities.
- Maintain or improve water quality and manage riparian communities, natural stream characteristics, estuaries and coastal waters for their significant ecological value.
- Preserve the cultural history of the Santa Monica Mountains, and encourage cooperative cultural resource stewardship with private landowners and other federal, state, and local agencies.
- Make facilities, programs and services of the recreation area reasonably accessible to all people, including those with disabilities.

- Plan and develop appropriate recreation and education facilities and amenities necessary to promote and support an enjoyable and safe recreation experience in the national recreation area.
- Create an experience that may increase visitor appreciation and awareness of the environment and historic sites within the SMMNRA and their place in the history of California.

The goals were considered when the partner agencies crafted a vision statement for King Gillette Ranch, resulting in the proposed project's objectives identified in Section 1.6.

1.5.2 King Gillette Ranch Vision Statement

In 1995, the National Park Service entered into a Cooperative Management Agreement (CMA) with California State Parks, Santa Monica Mountains Conservancy, and the Mountains Recreation Conservation Authority in accordance with 16 USC 1a-2(I). The CMA has enabled the partner agencies to exchange goods and services that have enhanced the partner agencies' management of SMMNRA. The partner agencies added an addendum to the CMA in 2008 to identify joint management of King Gillette Ranch and pursue design and construction of an interagency visitor center at the Ranch.

In taking action on the newly updated CMA, the agencies created a joint vision statement for the King Gillette Ranch planning process. The vision is designed to respect the commitments made by the people of the United States and the State of California when funding was authorized to purchase Gillette Ranch from Soka University. The following vision statements were prepared to guide the park agencies of the Santa Monica Mountains as they engage the public in planning for the management and operation of the site.

The unique aesthetic, historical and cultural values of the Gillette Ranch and its environs are of national significance and shall be preserved; all conceivable options for its planning in the future shall further that protection by ensuring adapted uses within the existing footprint and established landscape of the property.

The unparalleled convergence at Gillette Ranch of coastal, mountain and valley facets of the rare and threatened Mediterranean Biome, as well as their dependent natural systems and varied species, constitute a biologic diversity that shall be protected and restored for the appreciation and understanding of present and future generations.

The location of the Gillette Ranch at the geographic heart of the parklands of the Santa Monica Mountains National Recreation Area is further enhanced by the site's strategic proximity to the roads and trails that traverse the mountains. As such, the property shall serve as an unequalled point of access and orientation for a broad and diverse public, by which visitors can, through compatible recreational and learning activities, enjoy and appreciate the Santa Monica Mountains. Mountains.

The protection of the Gillette Ranch as a place of public trust was achieved by means of collaboration among the park agencies of the Santa Monica Mountains. Plans and operations for Gillette Ranch shall continue to perpetuate agency collaboration, thereby promoting the achievement of the respective missions through a seamless visitor experience that ensures the enduring protection of the Santa Monica Mountains.

The Vision prescribes that developed use of the Ranch should occur within the existing footprint and established landscape of the Ranch to preserve the aesthetic, historical and cultural values of the

property; that the Ranch should provide an unequalled point of access and orientation through compatible recreational and learning activities through which a broad and diverse public can enjoy and appreciate the Santa Monica Mountains; and that Ranch planning and operations should perpetuate continued agency collaboration thus furthering the agencies' respective missions through a visitor experience that ensures the protection of the Santa Monica Mountains.

To carry out the Vision statement, the agencies have developed primary management objectives for the full 588-acre King Gillette Ranch which include an objective to:

Establish an appropriately sized Federal and State agency administrative, environmental, and cultural education facility and a gateway Visitor Center on a suitable site with safe and dependable access to various highways and park facilities, specifically designed for park maintenance and planning operations to increase communication, cooperation, operational and organizational efficiencies for the SMMNRA.

I.6 Project Objectives

The objectives for the proposed project were derived from SMMNRA GMP mission goals and the King Gillette Ranch Vision Statement. The objectives will be used in this EA to measure the potential for success of each project alternative evaluated.

- Preserve the unique aesthetic, historical, and cultural values of King Gillette Ranch by pursuing adaptive uses within the existing footprint of the Ranch and implementing design features compatible with the original Ranch architectural theme.
- Protect and restore native plant communities for the benefit of the wildlife that depend on such habitats, and for the appreciation and understanding of present and future generations.
- Maintain or improve water quality of Stokes Creek and manage the associated riparian habitat for its significant ecological value.
- Apply sustainable design to minimize the short and long-term environmental impacts of Visitor Center development. Use resource conservation, recycling, waste minimization, and energy-efficient and ecologically responsible materials and techniques for construction when feasible.
- Design visitor center facilities to facilitate partner agencies' operational and organizational efficiencies for SMMNRA.
- Provide safe and dependable access from local highways and visitor orientation for the broad and diverse public coming to visit SMMNRA, including making facilities, programs and services reasonably accessible to all people, including those with disabilities.
- Plan and develop appropriate recreation and education facilities and amenities necessary to promote and support an enjoyable and safe recreation experience in the national recreation area.

• Design programs and facilities that will increase visitor appreciation and awareness of the environmental significance and historic sites within SMMNRA and their place in the story of California.

1.7 Issues and Impact Topics

Issues and potential impacts pertaining to the proposed action were identified from past NPS planning efforts and internal (agency) and public scoping. The following section discusses the scoping efforts, the issues that were derived from the scoping, and the resulting topics to be analyzed in this EA. Topics dismissed from further consideration are also noted.

1.7.1 Project Planning and Internal Scoping

Planning for a visitor center at King Gillette Ranch has included extensive pre-design work. Internal scoping efforts included the following outreach methods.

- Individual interviews with each agency partner
- An "eco-design" charette for selecting sustainable design features to incorporate into the visitor center conceptual design
- A three-day interpretive charette with agency stakeholders
- A two-day value analysis workshop, including a LEED program expert as a participant, culminating in the current checklist for the visitor center to reach a platinum LEED rating.
- A parking and circulation charette with a professional landscape architect to plan for most efficient ingress and egress to the visitor center

The consulting designer then prepared a pre-design report and draft schematics for a visitor center (Lucchesi Galati, 2009), including a detailed review of the physical and architectural setting at King Gillette Ranch, recommendations for the layout of the visitor center, construction sustainability features, and concepts for interpretive programs and visitor experience. An updated cost estimate was also prepared for the report.

The consultant's draft design packages were made available for interagency internal review prior to finalizing the report and schematic design.

Throughout the design process, an interagency steering committee of the visitor center agency partners met on a monthly basis to review potential issues and to formulate next steps in the visitor center design process.

I.7.2 Public Scoping

Public scoping for the use of King Gillette Ranch as public parkland began with preparation of the 1982 SMMNRA General Management Plan (GMP), when a jointly operated administration, environmental and

cultural education center at King Gillette Ranch (then referred to as "Claretville") was first proposed. Extensive public involvement reoccurred during the development of the 2002 Santa Monica Mountains National Recreation Area General Management Plan/Environmental Impact Statement. This planning effort continued the 1982 GMP's action for the joint facility at King Gillette Ranch and included a program-level environmental impact analysis of the action.

In October, 2004, after Soka University announced its willingness to sell King Gillette Ranch for public parkland, the park partners held a public scoping meeting to apprise the public of the pending acquisition and to present the KGR vision statement (Section 1.5.2) and receive public reaction to conceptual ideas for fulfilling the vision. The meeting also initiated development of a list of interested parties for future public scoping involvement.

In late 2008, NPS, CDPR, SMMC, and MRCA initiated the public scoping process for the proposed King Gillette Ranch Design Concept Plan (DCP). The proposed DCP would provide a vision for formalizing public access and recreational use of the full 588-acre Ranch and would implement site-specific improvements for the joint agency administrative, environmental, and cultural education center envisioned in the 2002 SMMNRA GMP. Public scoping for the DCP included receiving input on the construction and operation of a proposed visitor center. The initial scoping meetings included an informal site visit on November 8, 2008, and a formal public scoping meeting on November 18, 2008 to present the DCP and potential environmental issues being considered for the planning process and to gather public comments. The agencies received more than 200 comment letters and emails through the close of the scoping period on January 10th, 2009. Scoping comments related to the proposed visitor center follow.

- Support for the SMMNRA Visitor Center
- Support/concern regarding joint-agency administrative and operation center
- Support for expanded equestrian use of the Ranch, including potential construction of a new equestrian facility with arena, camping area and/or rehabilitation of the existing Stable building for equestrian use, designation of a perimeter trail system and overall trail improvements designed for equestrian use
- Concern regarding additional equestrian use and additional construction at the Ranch resulting in potential resource impacts and displacement of space for education/recreation programs
- Support for trail and park use support facilities (hitching posts, horse trailer parking, water troughs, bike racks, drinking water, restrooms, and picnic tables)
- Support for limited site concessions (book/gift shop, native plant nursery, food)
- Concern regarding parking fees
- General support for public outreach and education programs for local and inner-city schools, bilingual programs, programs for individuals with special needs, and programs for research, and non-profit groups
- Support for natural, scenic and cultural resource protection measures and programs

- Support for the Plan's various recreational spaces and programs, including but not limited to picnickers, hikers, cyclists and equestrians
- Support for proposed trail improvements and maintenance, need for trail connectivity to adjacent trail system
- Concern regarding filming/special events
- Request for recent assessment of biological resources on the property and potential impacts assessment

A Planning Update Notice was issued in March 2009 to notify the public of the status of the planning effort and anticipated schedule for the environmental review process, noting.

In September 2009, an additional Planning Update Notice was issued summarizing progress with the planning effort and to announce scoping meetings for further public input and feedback regarding a possible interagency visitor center use at the Ranch, how visitors would use such a facility, and what visitor amenities might be needed. The public workshops were held on September 24 and 26, 2009. The workshops were structured to receive participants' input on desired visitor center amenities and services through their responses to a guided qualitative survey. Overall, the public expressed support for the following design aspects of a visitor center.

- Preference for typical visitor center amenities including maps, restrooms, child friendly exhibits, light snacks, and available rangers to answer questions.
- Preference for a less developed facility, regarding both the scope of available activities and the built structure.
- Preference for less developed recreational amenities including smaller trails, and activities that lend themselves to visiting with family and friends, as well as animals like dogs and horses.

1.7.3 Issues

lssues and concerns with the proposed project are identified in the following list and are based on planning goals and objectives and on internal and public scoping.

- SMMNRA visitor services, including park orientation, education, and recreational opportunities, need to be improved to support an enjoyable and safe recreation experience in the national recreation area.
- *Natural resource conditions* should be maintained and improved, including protection of the native trees and vegetation communities. Native habitat should be preserved to serve the needs of wildlife and their movement through the area.
- Water quality and the riparian community along Stokes Creek needs to be preserved and protected for the ecological value such habitat provides, and for protection of designated critical habitat downstream for the southern steelhead trout and the tidewater goby.

- *Historic and archaeological cultural resources* that reflect the history of the Ranch need to be preserved, particularly relating to the "working ranch" use of the property. The architectural ambience of the Stable building and the general aesthetics of the scenic setting within the greater surrounding parkland setting need to be preserved. The less visible, but equally important, archaeological resources at the site need to be protected and preserved.
- *Climate Change.* The proposed visitor center needs to be constructed and operated using technologies and practices that would reduce the new facility's input of greenhouse gases into the atmosphere and would reduce the waste stream.
- *Fire, seismic, and other hazards* need to be addressed for visitor and staff safety in and around the proposed visitor center.
- Recreational facilities need to provide for the needs of Americans with disabilities, along with the needs of hikers, equestrians, bicyclists, and picnickers in a manner that is safe, facilitates access for the various recreational venues, and increases visitor enjoyment at the Ranch.
- *Traffic circulation* patterns would change with the potential increased visitation to the Ranch, and needs to be evaluated for potential increased congestion at the Mulholland Highway/Las Virgenes Road intersection.
- *Interpretive programs* are needed for local and inner-city schools, in bilingual format, for individuals with special needs, and for research-oriented and non-profit groups.
- Operations and special uses at the visitor center could have impacts on natural and cultural resources and on neighboring private residents.

I.7.4 Impact Topics Analyzed

Specific impact topics were developed to address concerns about potential natural, cultural, recreational, and operational aspects of the proposed visitor center as identified by the public, NPS and other agencies, and to address SMMNRA planning goals and objectives, federal laws, regulations and executive orders, NPS *Management Policies* (NPS 2006), and topics specified in NPS Director's Order 12. A brief rationale for the selection of the topics is given in this section, with the topics generally grouped under the main issue categories.

Natural Resources. The visitor center at King Gillette Ranch would be located within SMMNRA – an area of abundant natural resources. SMMNRA mission goals for natural resource protection are already established in the SMMNRA GMP. Several comments were received in support of the proposed Design Concept Plan's natural resource protection programs and efforts. Many comments were received expressing concern of potential resource impacts resulting from proposed Ranch uses, such as the visitor center. It is therefore necessary to characterize these natural resources and the potential environmental consequences to these resources that could result from implementation of the proposed visitor center construction and operation. Additionally, with the rising concern about climate change,

evaluation of the proposed visitor center's energy use and sustainable design is an identified priority for the NPS. The following topics concerning natural resources will, therefore, be analyzed.

- Aesthetics (Lighting and Noise)
- Air Quality
- Energy Use, Conservation Potential, and Sustainable Design
- Soils
- Vegetation
- Water Resources Hydrology and Water Quality
- Wildlife

Cultural Resources. NPS, CDPR, SMMC, and MRCA management policies, in accordance with federal and state laws and regulations, call for the consideration of cultural resources during the planning of proposed actions and preparation of environmental compliance documentation. There are documented archaeological resources within and adjacent to the project planning area. The large open spaces consisting of rolling hills, valleys, and ridgelines characterized by low density residential setting contribute to the cultural ambience of the surrounding landscape. Cultural resource issues will, therefore, be addressed under the following topics.

- Aesthetics (Visual Resources)
- Archaeological and Ethnographic Resources

Operations and Special Uses. Public scoping comments on the Design Concept Plan (including the visitor center) expressed varying degrees of support and concern regarding proposed Ranch operations and special uses including, among others, visitor services including interpretive programs and recreational opportunities for a variety of users, and special events. Park managers also need to provide for visitor accessibility and public safety. The visitor center proposal features a range of possible operations and special uses. Potential environmental impacts associated with these uses are addressed under the following topics.

- Accessibility for Individuals with Disabilities
- Energy Use, Conservation Potential, and Sustainable Design
- Land Use
- Public Health and Safety
- Traffic and Transportation
- Utilities
- Visitor Use and Experience

I.7.5 Topics Dismissed

Environmental Justice. Executive Order 12898, General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires that all federal agencies address the effects of policies on minorities and low-income populations and communities. Neither of the alternatives analyzed in this assessment would have disproportionate effects on minority and low-income populations as defined by the U.S. Environmental Protection Agency's 1996 guidance on environmental justice.

Floodplains. Executive Order 11988 (Floodplain Management) requires an examination of impacts to floodplains and the potential risk involved in placing facilities within floodplains. NPS Management Policies 2006, Director's Order 2: Planning Guidelines, and Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-making provide guidelines for proposed actions in floodplains. Existing and proposed structures in the project planning area, including buildings and traffic circulation features, would be located above the floodplain of the adjacent stream, Stokes Creek. The proposed geo-thermal cooling and heating system piping would take advantage of the existing utility corridor that crosses Stokes Creek. The proposed stormwater conveyance outlet would be located adjacent to the creek, but would be subject to standard NPDES permitting conditions for stormwater conveyance structures within flood zones. Overall, the proposed improvements are either outside the 100-year regulatory floodplain (FEMA Map 06037C1527F), or by their nature would not entice or require individuals to occupy the site, would not be prone to flood damage, and would not result in impacts to natural floodplain functionality. Therefore, floodplains were dismissed from further analysis in this EA.

Historic Structures and Cultural Landscapes. NPS defines historic structures as "a constructed work consciously created to serve some human activity." They include buildings and monuments, roads and other types of structures. Significant historic structures are ones that are listed or eligible for listing on the National Register of Historic Places, a list of important places in the history and prehistory of this country. According to the National Park Service's *Cultural Resource Management Guideline* (DO-28), a cultural landscape is "...a reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions."

NPS has consulted with the State Historic Preservation Officer regarding the buildings that compose the King Gillette Ranch property and landscape, including the Stable building associated with the Preferred Alternative. The agencies together have determined that, although structures built prior to 1952 were potentially significant due to their association with the historic development and use of the ranch as a ranching complex, subsequent changes to the buildings have altered their physical integrity to the point where they no longer reflect that history and are therefore not eligible for listing on the National Register (NPS 2007). Post-1952 buildings were determined not eligible for listing because they did not contribute to the ranching history at the site. Similarly, the agencies found that, while some cultural landscape characteristics have survived to the present (entry system, views west from the Gillette

Mansion, native oaks and Stokes Creek natural system assemblage, and structures that reflect the opulence of the original gentleman rancher's estate), more recent structures and development have compromised the cultural landscape to the point of National Register ineligibility. Therefore, because there are no significant historic structures or cultural landscapes that would be impacted by the implementation of the alternatives, this topic was dismissed from analysis.

Geological and Paleontological Resources. No significant geological or paleontological resources are within or adjacent to the project planning area. Geological hazards are covered under Public Health and Safety. Therefore, these two subjects were dismissed from further environmental analysis.

Museum Collections. The SMMNRA storage facility at Rocky Oaks contains more than 250,000 museum objects, specimens and archives. While the proposed visitor center may include limited collections to support educational exhibits, programs and activities at the visitor center, it is anticipated that the primary depository of SMMNRA collections will remain as the Rocky Oaks location. Implementation of elements of the action alternatives could result in minor additions to museum collections should archaeological data recovery be performed as mitigation for direct site impacts and/or discovery occur as a result of general recreation use of the Ranch and surrounding area. Although such additions would require museum storage space and ongoing collections maintenance and management, the discovery of new artifacts would be uncertain and likely limited in number. Therefore, any anticipated additions could be readily accommodated at the existing Rocky Oaks storage facility or readily incorporated into the Ranch's educational exhibits and programs. Museum collections would continue to be acquired, accessioned and cataloged, preserved, protected, and made available for access and use according to NPS standards and guidelines. Because implementation of the action alternative would negligibly affect museum collections, museum collections was dismissed from further environmental analysis.

Prime and Unique Farmlands. The vacant fields north of the project planning area are entirely Botella loam. Botella loam is considered prime farmland soil if irrigated (NRCS 2007). The project planning area has not been irrigated for agricultural purposes since the 1950s. The proposed project only proposes one action that would occur within the Botella loam soils area: the construction of a drainage swale to reduce rain event sheet flow towards the Stable building. That action is covered in Section 3.2.9, Soils. Through consultation with the USDA Natural Resources Conservation Service, it was determined that, while there are prime or unique farmlands associated with the project planning area, the farmland conversion impact rating indicated the proposed use of the site would not require further evaluation (Appendix F). Therefore, prime and unique farmlands were dismissed from further analysis in this EA.

Public Services. The proposed alternatives in this EA would not result in the need for new or expanded fire or police protection services beyond what is already provided to the project planning area. The alternatives would also not generate the need for any new schools, and would not impact road maintenance or other public facilities' maintenance. Therefore, the topic was dismissed from further environmental analysis.

Socioeconomics. Council on Environmental Quality regulations for implementing the National Environmental Policy Act, 40 CFR 1500, direct economic analyses of federal actions that will affect local or regional economies. The policies and rationale associated with the retention of socioeconomic impacts for evaluation as an impact topic are found in Management Policies 2001 (NPS 20006) pertaining to gateway communities. The local and regional economies of Calabasas, Malibu and the Los Angeles metropolitan area do not depend on the SMMNRA for business associated with tourism or resource use. Although Malibu and Calabasas are "gateway communities" to SMMNRA in that they serve visitors to the area with food, overnight accommodations and other services, the impact of park visitors' spending in the local economy is negligible. The proposed project would create a limited number of short-term construction jobs for up to two years during the construction phase, and would create no new positions or a minimal number of new positions during the operational phase. Beneficial effects would be negligible and only for the duration of proposed construction. Therefore, socioeconomic resources were dismissed from further analysis in this EA.

Wilderness Experience. There is no designated Wilderness area within the project area. Therefore, potential issues associated with Wilderness areas are dismissed from further environmental analysis.

Wild and Scenic Rivers. There are no wild or scenic rivers within the project area. Therefore, potential issues associated with wild and scenic rivers are dismissed from further environmental analysis.

2.0 ALTERNATIVES

This section describes the No Action Alternative and one action alternative representing a Preferred Alternative for construction and operation of a new SMMNRA gateway visitor center (Visitor Center) at King Gillette Ranch.

The No Action Alternative describes the continuation of existing conditions within the 18-acre project planning area. "No Action" does not imply that current uses or operations will be discontinued, or that other future actions might not occur; rather, the term implies that current operations will continue at the site on an as-needed basis in reaction to changing maintenance or operational needs. The No Action Alternative provides a basis for comparing the management direction and environmental consequences of the Preferred Alternative. Should the No Action Alternative be selected, the agencies would respond to future needs and conditions associated with the need for visitor facilities without major actions or changes in management direction.

The Preferred Alternative was derived from the SMMNRA GMP, the King Gillette Vision Statement, and internal and public scoping exercises. As prescribed in the Vision Statement, the partner agencies collaborated on Visitor Center planning, design, construction, and operation. The Preferred Alternative describes facilities and programs needed to achieve identified goals and objectives for construction and operation of a full-service Visitor Center for SMMNRA at King Gillette Ranch.

Table I, comparing the No Action Alternative and the Preferred Action Alternative, is presented at the end of this section. Additional alternatives considered and dismissed from detailed analysis are also discussed in this section.

2.1 Alternative A: No Action

2.1.1 Visitor Services Management

Under this alternative, the agencies would continue to use the King Gillette Ranch facilities (Figure 5). The 588-acre Ranch area would continue to provide public access to SMMNRA lands through use of existing structures, public parking areas/kiosks, directional and information signage and restrooms, but no visitor center would be established at the Ranch. The agencies would continue to seek opportunities for a visitor center at other suitable sites in the recreation area. The agencies would rely more on the existing informal approach to use of the Ranch and its facilities, in their current condition, to support the public access, recreation and education programs and activities currently available. Some visitors would continue to utilize the SMMNRA Visitor Center in Thousand Oaks.

2.1.2 Park Operations

MRCA facilities staff would conduct routine maintenance of the area associated with buildings, grounds, and visitor safety. Education program staff would continue to operate out of the Dormitory. MRCA law enforcement rangers that patrol the Ranch and other MRCA sites would continue to operate out of

offices at King Gillette Ranch. Approximately 15 staff are based at King Gillette Ranch. One to two employees operate out of the Print Shop. All other staff have offices in structures outside the project planning area.

NPS Interpretation Division staff and other MRCA interpretive staff based at the other locations within SMMNRA currently travel to King Gillette Ranch to provide interpretive programs.

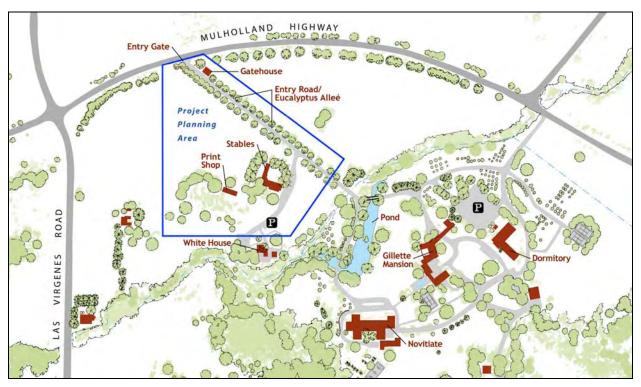


Figure 5. No Action Alternative—King Gillette Ranch Facilities

2.1.3 Buildings

Under Alternative A, none of the three existing structures located within the project planning area boundary would be used to support visitor services at the Ranch. Two of the buildings (the Gatehouse and the Stable), would remain vacant under this alternative. The third building, known as the Print Shop, would continue to serve as a park maintenance office, work shop, and equipment storage.

2.1.4 Circulation

In the No Action Alternative, visitors would continue to enter the site via the one lane entrance gate. They would drive past the vacant Gatehouse on the narrow entrance drive/eucalyptus-lined allée. Outside of the Gatehouse, visitors could continue to pick up self-service information about the park. Visitors would then continue driving down the tree-lined allée and follow signs to either the native plant garden parking (located within the project planning area) or to the larger parking lot east of the project planning area near the Dormitory. Visitors to the native plant garden would turn right (south) just past the Stable building and park in the paved 10-car parking lot or informally on the side of the road, or in the open field to the east of the Stable. An accessible chemical toilet located outside of the planning area in the vicinity of the White House would continue to be the only restroom facility for visitors in this part of the park.

2.1.5 Programs

Education and public interpretive programs at King Gillette Ranch would remain unchanged under the No Action Alternative and would continue to meet primarily at the Dormitory, outside of the project planning area. The types of educational and interpretive programs currently offered throughout the Ranch that are expected to continue under the No Action Alternative are described below. Of the programs listed, only two public interpretive walks per month (a bird walk and a historical tour of the grounds) originate within the project planning area.

Under the No Action Alternative, some growth is expected in the amount of programming as the public and the educational communities continue to learn more about the programs available, and the agencies respond to this demand. The type of programs, anticipated attendance, and projected schedule of these programs is described below. This description was used for the No Action Alternative (baseline) in the traffic study in Appendix D.

Educational Programs

Presently, the MRCA offers standards-based education programs through the Las Virgenes Unified School District and Los Angeles Unified School Districts (LAUSD). Targeted outreach ensures that the Ranch serves as both a local educational resource as well as a regional facility for children from all parts of southern California, especially Los Angeles. Students use the existing Ranch trail system and the undercrossing between the Ranch and Malibu Creek State Park. Overnight programs are offered and are centered at the Dormitory and rarely use the project planning zone.

Presently, day-use education programs (8 a.m. – 4 p.m.) accommodate 34-70 participants per day and occur two times per week, Monday through Friday, during the school year (generally September-June). Overnight programs involve both education and retreat activities that accommodate 180 participants (inclusive of program participants, chaperones, camp hosts, etc.) and occur 15 times per year, Monday through Friday, during the school year (generally September-June).

Due to the lack of restroom facilities, none of the educational programs originate from the project planning area. Instead, buses enter the park via a separate entrance and drop students off near the Dormitory, located east of the project planning area. Under the No Action Alternative, both day-use and overnight education programs would continue to radiate out from the Dormitory. Use of the project planning area by educational groups would be infrequent and the area would continue to be underutilized by formal education groups.

Public Programs

Agency-led interpretive programs at the Ranch would continue to be available to the general public. Programs would be offered on both weekday evenings and during the day on weekends. These programs would include interpretive hikes on a variety of natural and cultural history topics, family campfire programs, and programs designed specifically for children. Generally these interpretive programs would not utilize the project planning area except to pass through or as a brief interpretive stop, due to the lack of restrooms and other visitor amenities.

Under this alternative, various Ranch tours and hikes for up to 40 persons would continue to be offered year-round, primarily Friday to Sunday with occasional tours and hikes occurring on the weekdays. Presently, organized tours and hikes occur approximately once a week, with day hikes led from 8 a.m. to sunset and night hikes led from 7 p.m. – 10 p.m. Ranger-led evening campfire programs for up to approximately 100 persons would also continue to be offered once per month, primarily on weeknights in the spring, summer and fall, and typically occur from 7 p.m. – 9 p.m. These campfires utilize a portable campfire grate placed on the grass near the Dormitory or the mansion. Although approximately two public programs per month utilize the parking in the project planning area; all of the traffic bound for these programs utilizes the tree-lined entrance road to reach the larger parking lot east of the project planning area near the Dormitory.

2.1.6 Informal Recreational Visitation

Although the majority of park visitors utilize the larger parking lot near the Dormitory, the small parking lot within the project planning area (near the native plant center) serves as a *de facto* trailhead for some of the hikers using the 4.8 miles of official and unofficial trails on the Ranch. Within the planning area, the Stable building and the tree-lined entrance drive are favorite subjects for artists who frequent the park. Birders find a variety of avian species near the native plant garden, which is considered one of the more diverse inland birding sites in the SMMNRA. People interested in native plants and restful natural places enjoy wandering the walkways and resting on the benches in the native plant garden. In the No Action Alternative, these informal recreational uses would continue.

2.1.7 Special Use Permits

There is no local or state funding presently dedicated to operate King Gillette Ranch. As such, revenues generated by special events and uses are necessary to support maintenance of the property and educational programming. These funds are used to keep the Ranch self-sustaining. Under the No Action Alternative, this budget scenario is likely to continue.

The majority of special events and permitted uses occur outside the project study boundary, although occasionally a filming permit or photo shoot is permitted to utilize the area within the study boundary.

In general, special events and uses are allowed year-round on a case-by-case basis and are scheduled, organized and managed to avoid interrupting general public visits to the Ranch grounds. Special events and uses may include weddings, commercial photo shoots, filming, and private and company picnics, which occur primarily Friday through Sunday from 9 a.m. -10 p.m. Existing venues for special events and uses include the tennis court adjacent to the Gillette Residence, as well as the main lawn and the fountain courtyard adjacent to the Gillette Residence. These locations accommodate events for up to 400 persons.

2.2 Alternative B: Preferred Alternative

2.2.1 Visitor Services Management

The Preferred Alternative would implement site-specific improvements at King Gillette Ranch for construction and operation of a new gateway Visitor Center for SMMNRA as described in the Vision Statement (Section 1.5.2). Under this alternative, the agency partners would use the existing King Gillette Ranch Stable building and environs to establish a visitor services area close to the Ranch entrance, but not readily visible from Mulholland Highway or Las Virgenes Road. Services, and facilities in this area would be designed to orient visitors to the recreational, natural and cultural resources of SMMNRA. These improvements are shown on Figures 6, 7, and 8, and are described as follows. As prescribed in the Vision Statement, the partner agencies would collaborate on Visitor Center planning, design, construction, and operation.

2.2.2 Park Operations

The Preferred Alternative would create new maintenance and operational responsibilities for NPS and the agency partners. The new Visitor Center and the Visitor Center Services Area would require park staff to run the Visitor Center and provide interpretive programs. The new facilities would require routine and cyclic maintenance, including custodial work, landscaping, utility and security systems upkeep. Law enforcement rangers would patrol and respond to public safety incidents. Staffing would be implemented cooperatively between NPS and MRCA staff. NPS staff for the current visitor center in Thousand Oaks may shift to the new Visitor Center at the Ranch instead of working at NPS headquarters in Thousand Oaks. NPS facilities staff, who would share maintenance responsibilities with MRCA, would remain based at the adjacent NPS-owned Diamond X Ranch. MRCA maintenance staff with shop space in the Print Shop would be relocated outside the project planning area. Some services, such as routine grounds maintenance and custodial services, may be contracted. NPS rangers would continue to travel to the Ranch from their base office at NPS-owned Paramount Ranch. MRCA law enforcement rangers would continue to be based at the Ranch. All law enforcement rangers would continue to also patrol several other park sites throughout SMMNRA.

2.2.3 Buildings

Under Alternative B, two of the three existing structures located within the project planning area would be altered in support of the proposed Visitor Center Services Area at the Ranch (Figure 7). The 6,000 sq. ft. Stable, would be modified to serve as the Visitor Center. The exterior of the 611 sq. ft. Gatehouse would remain unchanged, and the interior would be modified for office space during construction and later to support the volunteer program at the Ranch. The third existing structure, the 2,400 sq. ft. Print Shop, would be demolished and its foundation restored as a picnic area.

A new 1,000 sq. ft. restroom and storage building would be constructed as part of the Visitor Center project, and another 950 sq. ft. multi-purpose visitor building would be designed and constructed in a future phase. The three final buildings of the visitor complex (the Stable, restroom, and future multi-purpose visitor building) would be constructed in a U-shape to form an orientation plaza that would welcome and serve basic visitor needs.

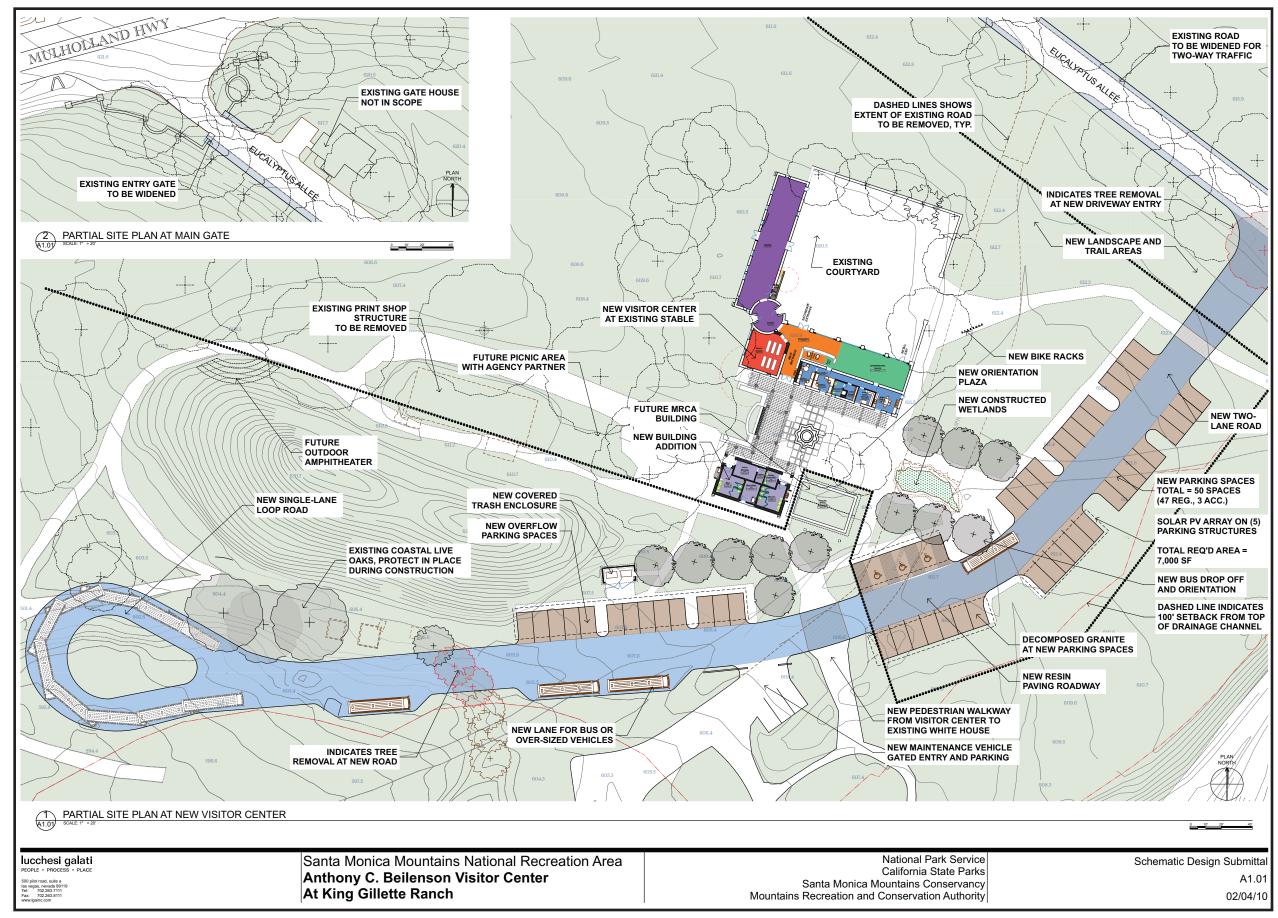


Figure 6. Preferred Alternative---Proposed Visitor Center Facilities

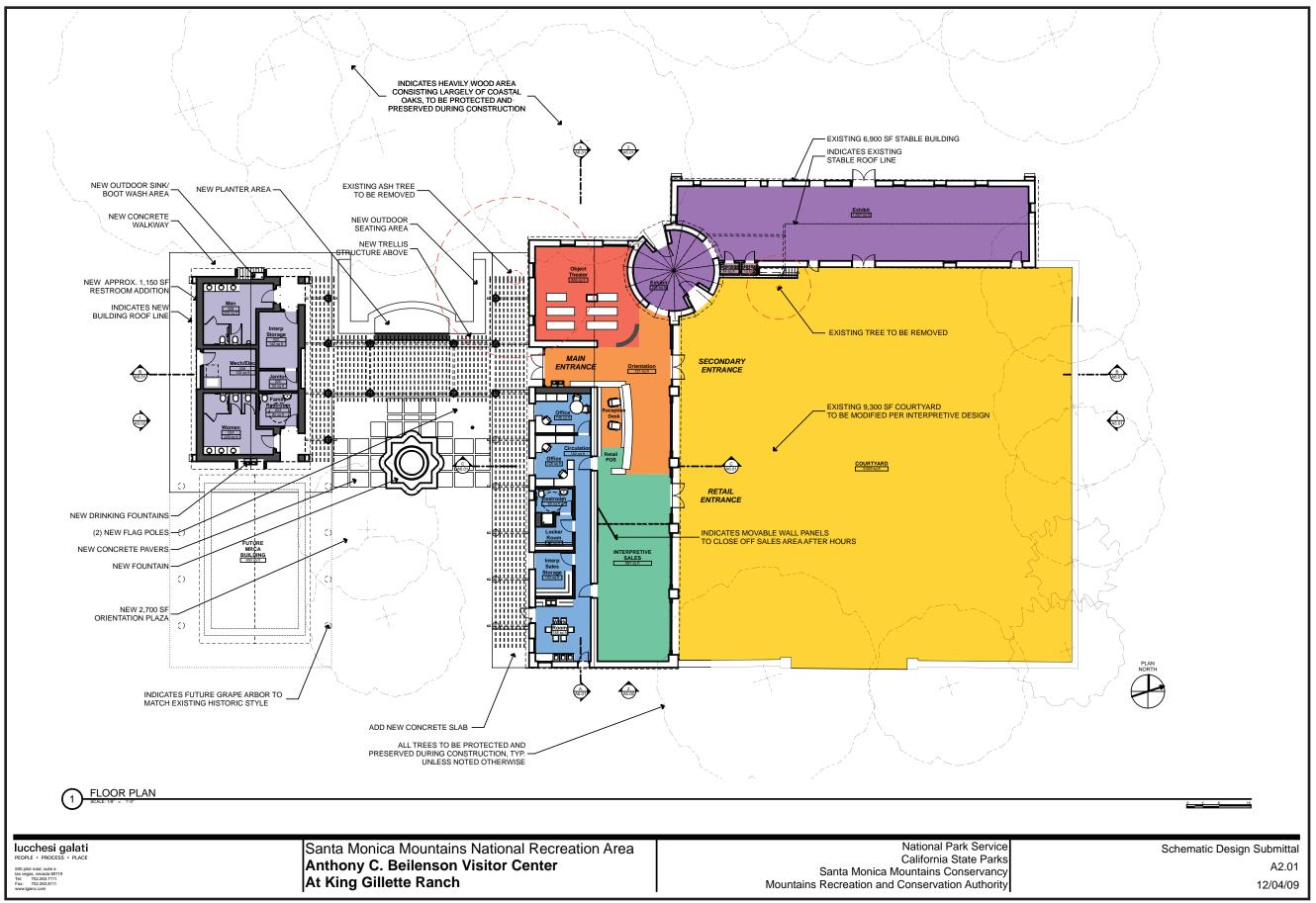


Figure 7. Preferred Alternative---Proposed Visitor Center Services Area

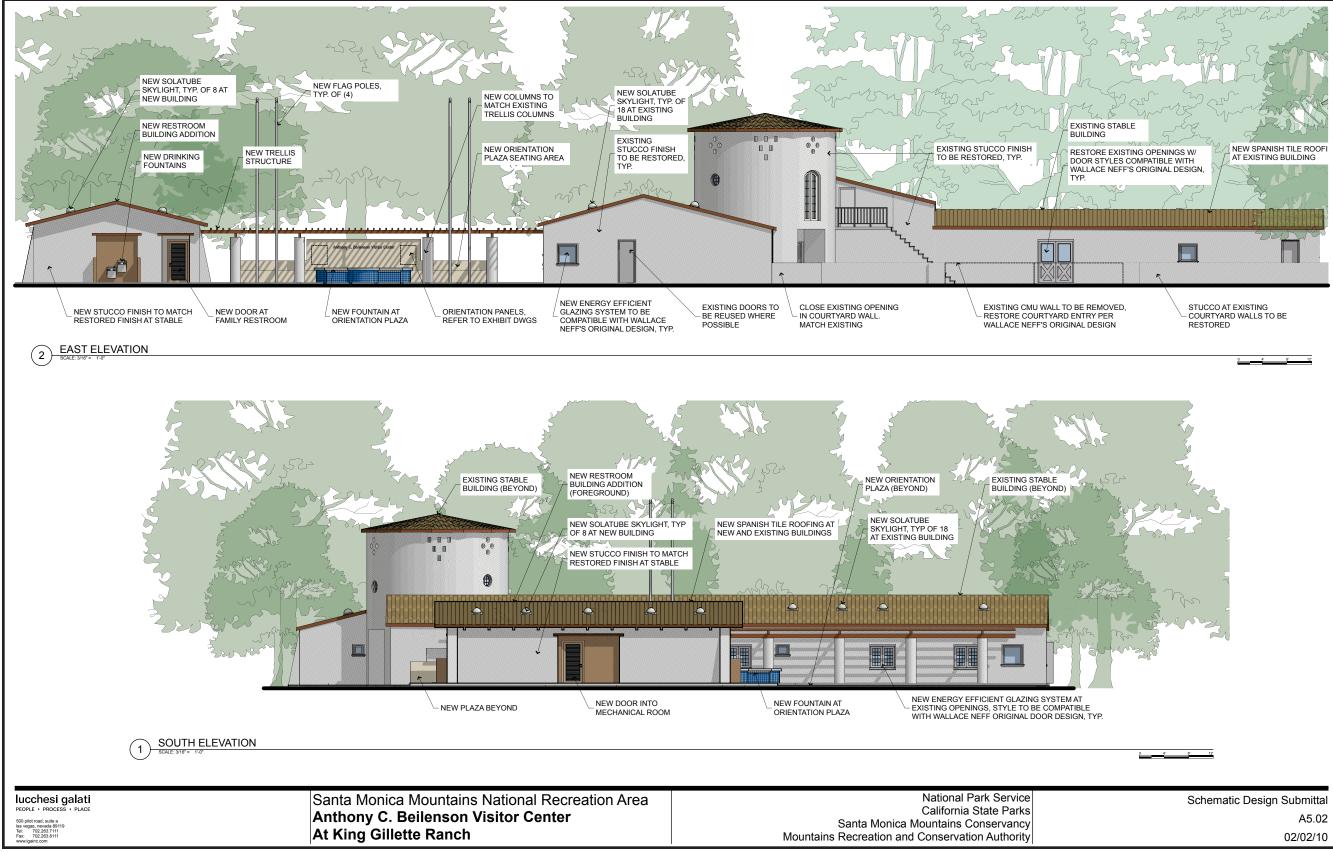
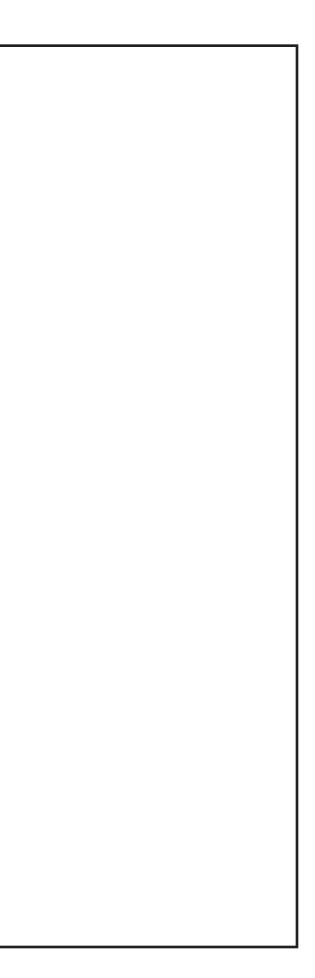


Figure 8. Preferred Alternative---Proposed Visitor Center East and South Elevations

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In Alternative B, the NPS and partner agencies' objective "to apply sustainable design to minimize the short and long-term environmental impacts of Visitor Center development" (Section 1.6) is reflected in the Visitor Center's design. The goal is to develop a "net-zero" facility—one that produces all its own energy needed during the course of a year, thus resulting in a carbon-neutral operation.

The Preferred Alternative includes the following actions.

Modify the 6,000 sq. ft. Stable to include a Visitor Center desk and orientation space, interpretive sales area, audio-visual alcove, interpretive exhibits, and three small offices. This building would be modified using its original walls and architectural character to achieve a LEED platinum rating for sustainability. The Leadership in Energy and Environmental Design (LEED) Green Building Rating System[™] is an internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. The platinum rating is the highest of four achievement levels. Sustainable technology modifications to the Stable include solar energy infrastructure, Solatube[®] natural lighting, an energy-saving heating and cooling system, use of high-recycled-content or sustainably grown or produced building materials from nearby suppliers, on-site wastewater treatment systems, and other sustainable technologies.

A geo-thermal loop exchange system would be constructed for heating and cooling. The system would require construction of a water conveyance pipeline from the Visitor Center to the existing pump house at the pond near the mansion. Approximately 125 feet of the pipeline would span the Stokes Creek stream channel.

- Construct a 1,000 sq. ft. restroom and storage building and a shaded arbor walkway connecting it to the Visitor Center entrance. This restroom would include innovations to minimize water use and save energy.
- Specify the location for future construction of a 950 sq. ft. multi-purpose visitor services building (e.g. space for additional permanent and temporary exhibits, expanded theater or multi-purpose room).
- Demolish the 2,400 sq. ft. Print Shop and restore the foundation and nearby grounds to serve as a small picnic area.
- Establish storm water runoff control and treatment system designed to collect and filter stormwater runoff from the project planning area. Improvements would be in the new Visitor Center Services Area, the fields north of the Stable and east of the entrance road, and include a conveyance pipe to a point southwest of the parking area.

2.2.4 Circulation

Specific features of the circulation system would include parking for cars and over-size vehicles, a trailhead for recreationists using the Ranch trail system and a vehicular drop off zone and central gathering space for day-use visitors and for visitors participating in day-use educational and interpretive programs at King Gillette Ranch.

The Preferred Alternative includes the following actions.

- Widen the existing entry gate (re-locate or re-construct western section of wall) to accommodate two-way traffic.
- Widen the entrance road from the entrance gate to the Stokes Creek crossing to accommodate two-way traffic.
- Construct a paved driveway and 50-space automobile parking lot, of which at least three spaces would be handicapped-accessible. Parking also is designed for four oversize vehicles (bus, RV or trailer), and a designated drop-off zone adjacent to the Stable and orientation plaza. Solar panel "carports" would cover a portion of the parking spaces.
- Construct a visitor entry plaza featuring orientation exhibits, wayfinding signs, a group gathering space, and a low-volume water feature to establish a Mediterranean ambiance.
- Incorporate into the parking lot and Visitor Center Services Area a stormwater runoff collection system that directs rainwater and stormwater into landscaped areas where feasible, including bioswales around the parking lots.
- Construct accessible pathways, install bicycle racks, and install a nearby hitching post or rail to formalize access and circulation for all visitors to these facilities.

2.2.5 Programs

Alternative B, the Preferred Alternative, supports the vision for King Gillette Ranch and SMMNRA by constructing facilities that expand the capacity for day-use educational programs and both staff-led and self-guided interpretive experiences for the general public. The type of programs, the anticipated attendance and projected schedule of these activities is described below. This program scenario was used for the traffic study in Appendix D. The following new program-related structure is proposed in this alternative.

• Construct a small, outdoor amphitheatre for interpretive programs at the knoll southwest of the Stable. This amphitheatre would use the natural contours of the knoll outcropping to provide seating for up to 100 people.

Educational Programs

The group drop off location for day use education programs would shift from the Dormitory to the new Visitor Center. Day-use education programs (8 a.m. -4 p.m.) would increase from 70 participants (one bus) in each of two programs per week in the No Action Alternative scenario to 140 participants per day (two buses) in each of three programs per week in the Preferred Alternative.

Overnight education programs would continue to be housed in the Dormitory, east of the project study location, and would utilize the facilities associated with the Visitor Center at least once during their stay.

Public Programs

Alternative B would expand public interpretive programs offered at the Ranch and change their meeting location from the Dormitory to the new Visitor Center. A variety of Ranch tours and hikes for up to 40 persons would continue to be offered year-round, primarily Friday to Sunday with occasional tours and hikes occurring on the weekdays. Under this alternative, organized tours and hikes would increase from two times per week to nine times per week (three per day).

As in the No Action Alternative, campfire programs for up to approximately 100 persons would continue to be offered in the evening once per month, primarily on weeknights in the spring, summer and fall, and typically occur from 7 p.m. – 9 p.m. Some of these programs would utilize the new amphitheatre in the project planning area.

2.2.6 Informal Recreational Visitation

Under this alternative, all day use visitors would park in the new parking lot in the project planning area. Trail users, artists, birders and picnickers would utilize this new parking lot and orientation exhibits as a staging area and trailhead for their activities.

2.2.7 Special Use Permits

In general, permitted special events and uses would continue to include weddings, commercial photo shoots, filming, and private and company picnics. This alternative creates two additional venues for events (up to 100 people) at the Visitor Center: the entry courtyard (evenings only) and the improved Stable courtyard. Both courtyards could be utilized for a larger (up to 200 people) event after hours.

Weddings, private parties and company picnics would continue to occur primarily Friday through Sunday. Filming and photo shoots would be permitted on a case-by-case basis. All special uses would only be permitted if and where they are compatible with the visitor experience and would not negatively impact wildlife in the area.

2.3 Environmentally Preferred Alternative

In accordance with the National Environmental Policy Act (NEPA) and Section 2.7(D) of *Director's Order 12 and Handbook* (NPS 2006), the National Park Service is required to identify the environmentally preferred alternative in all environmental documents, including EAs. The environmentally preferred

alternative is the alternative that would promote the national environmental policy as expressed in the following six criteria described in Section 101(b) of NEPA.

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

The environmentally preferred alternative in this EA is Alternative B, the Preferred Alternative. This alternative was selected based on the following criteria.

- Fulfills criterion I by constructing a facility to welcome and orient visitors to SMMNRA and to serve as a base for interpretive and education programs. This action strengthens the outreach and education efforts of the national recreation area, ensuring that present and future visitors understand and appreciate the environment of SMMNRA. It improves visitor safety and access to public lands by providing a centrally located opportunity for park orientation and interpretation for SMMNRA visitors.
- Fulfills criteria 2 and 3 by improving visitor access to orientation and park safety information in advance of their park experience. The new Visitor Center would be designed to meet federal and state accessibility guidelines and building codes for fire and seismic hazard protection. It provides for an aesthetically and culturally pleasing visitor experience by using an existing attractive structure that conveys a sense of the original uses and history of the site.
- Fulfills criterion 4 by preserving important historic, cultural, and natural aspects of our national heritage because this alternative modifies an original building at King Gillette Ranch designed by a regionally significant architect. This action enhances an environment that supports diversity and variety of individual choice. SMMNRA features a wide range of recreational trail opportunities and education programs. The new Visitor Center would quickly orient visitors to all of the cultural, natural, and recreational resources of the national recreation area by creating a public visitor center where the importance and location of these resources would be showcased.

- Fulfills criterion 5 by using an existing structure rather constructing a new one, and by incorporating sustainable technologies that would grant a LEED platinum rating for energy-efficient buildings.
- Fulfills criterion 6 by serving as a central location for visitor orientation and interpretation of the SMMNRA, a unique recreational amenity of national significance for the diverse population in the Los Angeles area, and for other visitors from throughout the United States and the world. The interpretive exhibits and programs envisioned in Alternative B would contribute to the public understanding of and support for conservation of one of the world's best examples of the Mediterranean biome—the Santa Monica Mountains.

Alternative A, the No Action Alternative is not the environmentally preferred alternative because it would not assure a much-needed centralized visitor center for SMMNRA featuring aesthetically pleasing and safe facilities, would not promote the widest range of beneficial uses associated with visiting the national recreation area, would not achieve a balance between population and resource use owing to inefficiencies in providing visitor orientation and environmental education to the growing population of the region, and would not enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

2.4 Alternatives Considered but Dismissed

Analysis of the scoping comments related to the project planning site and design options considered for the Visitor Center led to the dismissal of several actions that might have been incorporated into other alternatives. These alternatives included components that failed to meet the project objectives, included actions that generated unacceptable levels of resource impacts, or were generally unacceptable per the terms of alternative elimination found in *Director's Order 12*, Section 4.5(E)(6) (NPS 2006), which are as follows.

- Does not implement the decisions of the General Management Plan for the project area.
- Does not satisfy guidance criteria, meet project goals, or resolve park planning needs.
- Severe environmental, cultural, scenic, visitor experience, or operational impacts would occur.
- Environmentally superior alternative was selected for further study.
- Is not technically or economically feasible.

Those alternative actions considered but eliminated from detailed study fall into four main categories: visitor center location, parking, circulation, and use of the facilities and land to support equestrian activities. The nature of the dismissed features and the rationale for their rejection are addressed.

2.4.1 Alternative Visitor Center Locations

- <u>Construct new building</u>. The option of constructing a new building to serve as a visitor center was considered but eliminated because there was already an aesthetically pleasing vacant building, the former Stable built for King Gillette, on the site. This existing Stable building is ideally situated near the park entrance and is approximately the right size for a visitor center for SMMNRA. Its compelling story would contribute to the visitor experience in a way that a new building would not. In addition, re-use of an existing structure is one recommended approach for green construction projects. Therefore, the new construction option was eliminated because a superior alternative was selected for further study.
- Locate Visitor Center in one of the other existing buildings on site. Although there are three other existing structures at the Ranch large enough to serve as a visitor center, none of them are located near the site entrance, widely recognized as the best location for a park visitor center. One building, the Dormitory, was considered further and selected to be the temporary visitor orientation site because it has restrooms and is located near the largest parking lot at the Ranch. However, the Dormitory was also recognized as the most suitable location to house school children for overnight environmental education programs, another important component of the vision for this park property. Making improvements to accommodate a public visitor center on the first floor of the building with environmental education participants housed above, was considered but dismissed as incompatible with the use of the same building as an environmental education center. Due to this inherent conflict, its unsuitable location far from the park entrance, and because a superior alternative exists, planners eliminated the Dormitory from further consideration as a location for the visitor center.
- <u>Design a reduced-scale visitor center in one of the other existing buildings on site</u>. Although small contact stations operate in several locations throughout the park, the scattered, smaller facilities do not provide efficient visitor orientation or offer the infrastructure for a diversity of interpretive programs. This option also would not meet the identified need for and project goal to have a full-service visitor center for SMMNRA. Therefore, the reduced-scale visitor center alternative was dismissed.

2.4.2 Alternative Circulation Options

During the scoping and design phase, two distinct vehicle circulation options were considered to solve the issue presented by the current single-lane entrance gate and narrow entrance road. These were dismissed in favor of the Preferred Alternative, which is to widen both the gate and the road for twoway traffic.

• <u>Preserve existing narrow gate and one-lane entrance road as one-way entrance, and build new one-way exit onto Las Virgenes Road directly across from the entrance to Malibu Creek State Park.</u> A new signal would be required on Las Virgenes Road at the intersection of Ranch exit road and the entrance to Malibu Creek State Park. This option was dismissed due to the cost and environmental impacts of constructing the exit road, signalizing the new intersection, and on existing congestion on Las Virgenes Road. Another disadvantage and reason for dismissal of this option was that

visitors might become disoriented when they depart the park onto a different road than the one they arrived on. Therefore, because an environmentally superior alternative exists and because this other option would cause major adverse visitor experience impacts and was economically infeasible, this alternative was dismissed from further consideration.

• <u>Construct a new one-way exit spur road east of the Gatehouse to intersect with Mulholland</u> <u>Highway</u>. This option would maintain the current entry gate and entrance road width between Mulholland Highway and the Gatehouse. From the Gatehouse to the Visitor Center parking access road, the tree-lined allée would be widened to accommodate two-way traffic. A new exit-only spur road would be constructed beginning southeast of the Gatehouse and running due north to the intersection with Mulholland Highway, east of the entrance road. This option was dismissed due to potential visitor confusion about the location of the designated entrance. This confusion may have become a traffic safety problem if visitors, especially those traveling west on Mulholland, attempted to enter the park through the exit road. Therefore, because it would cause severe operational and visitor experience impacts, this alternative was dismissed from further consideration.

2.4.3 Alternative Parking Options

In conjunction with the various circulation options considered, designers presented two distinct options for the location of the 50-car parking lot prescribed for the project. These two options and the rationale for their dismissal are described below:

- <u>Construct the parking lot northwest of the Stable in the abandoned agricultural field between the Stable and Mulholland Highway</u>. In this alternative, the parking lot would be readily visible upon entrance to the Ranch. While this parking location would alleviate visitor confusion about where to park, the agencies wanted to retain the aethestic experience of having visitors drive down the eucalyptus lined allée surrounded by open fields. In addition, the parking lot would have been visible from Mulholland Highway. Therefore, because this alternative would have major adverse cultural, scenic, and visitor experience impacts, and because a superior alternative exists, this option was eliminated from further consideration.
- <u>Construct the parking lot and turn around entirely in the current overflow parking area east of the Stable but closer to Stokes Creek</u>. This parking option was superior from a circulation and visitor experience perspective, but conflicted with Coastal Act policies for a 100-ft stream setback from Stokes Creek. The setbacks are required to protect sensitive riparian habitat and water quality. The need for federal consistency with the California Coastal Act and the potential for major adverse environmental consequences warranted the dismissal of this parking alternative in favor of an environmentally superior alternative outside of the 100 foot setback for Stokes Creek.

2.4.4 Alternative Use of Ancillary Structures

• <u>Leave Print Shop intact as maintenance facility or modify as visitor-serving facility.</u> Pre-draft scoping comments and the Vision statement for the Ranch encouraged the agencies to use the existing buildings and footprint for all development at the Ranch. Unfortunately, the function of this building as a maintenance office and shop, a back-of-the-house activity, is not compatible with the visitor-

serving facilities of this zone of the Ranch. Also, the aesthetics of the building—a corrugated metal shed—are not compatible with the design of the Stable building. In addition, its condition and location behind a group of oak trees make it difficult to modify as a visitor support facility. Because both options for the Print Shop would have had a severe impact on scenic resources and the visitor experience, they were dismissed in favor of the Preferred Alternative. The Preferred Alternative calls for removing this building and replacing in its footprint new facilities, including picnicking, closer to the proposed parking area and the Visitor Center.

2.4.5 Alternative to Use Land and Facilities for Equestrian Uses

During the scoping process many letters and email supported the development of equestrian facilities at the Ranch. One alternative the agencies considered was to restore the Stable building for use as an active stable to showcase the importance of horses in the area or as a living history ranch. Another proposal considered by the agencies in response to public comments was to develop equestrian facilities within the Ranch area that would support horse shows, gymkhanas, horse boarding, and Pony Club events. In addition, the agencies considered requests for an overnight equestrian campground with horse trailer parking and water and electrical hookups. These alternative actions were considered but dismissed for the following reasons.

- <u>Restore Stable building as a stable for horses and other ranch animals</u>. In this alternative, the Stable building would be restored to the original design as a stable for livestock and poultry and a bunkhouse for ranch hands. The site would possibly be used as a living history site complete with ranch animals. The agencies considered this alternative, but found it does not implement the decisions of the General Management Plan for the project area. Nor does it satisfy project goals, or resolve park planning needs for a gateway visitor center at this site. The proposed equestrian use would dominate the site and would be in conflict with the goals and objectives of the SMMNRA GMP and Gillette Ranch Vision Statement. The proposed equestrian use would not offer a variety of individual choices for visitors to the site. This alternative would have a very high cost for limited public benefit when compared with use of the building as a Visitor Center.
- Develop the site for equestrian-oriented uses. This alternative would develop portions of the Ranch into active equestrian facilities. While equestrian facility development at the Ranch would serve a public demand for recreational equestrian use, the agencies considered this alternative in the context of the limited amount of available space at the Ranch for educational programs and visitor services. The agencies found that adequate existing and planned equestrian facilities are available in or near SMMNRA, and that the highest and best visitor-serving use of the areas would be for programs that serve the diversity of residents in Los Angeles coming to visit SMMNRA for recreational, interpretive, and education purposes. Additionally, equestrian facility development would potentially cause environmental impacts. Equestrian facilities would require grading and construction in highly visible areas of the site, along with drainage improvements and costly maintenance requirements to protect water quality, control dust, and reduce natural resource impacts. The agencies dismissed this alternative because the activity would not implement the decisions of the General Management Plan for the project area, would not meet project goals or

park planning needs, would potentially cause severe environmental impacts, and would not be economically feasible.

Table I. Alternatives—Comparison of Actions					
BUILDINGS AND CIRCULATION					
ALTERNATIVE A: ALTERNATIVE B: NO ACTION PREFERRED PROJECT					
	Visitor Access and C	Circulation			
Entry Gate	No Change	 Circulation Improvement Include in the network; the trail features an outstandingly good management reason for including it. Relocate or reconstruct western section of wall and gate 			
Gate House 611 sq. ft.	No Change Vacant	 Park Entry Kiosk/Visitor Support Park entry kiosk w/ office (up to 2 persons) Storage Temporary construction office/HQ No substantial building improvements necessary 			
Entrance Road Eucalyptus Allée	No Change	 Circulation Improvement Widen driveway within existing trees for improved 2-way vehicular traffic 			
Parking	 No Change Paved parking for 10 vehicles at native plant garden Informal parking on the side of the road and in the vacant field to the south 	 Parking Improvement Formalized parking for 50 vehicles (including 4 accessible spaces) plus 4 oversize vehicles (bus or RV) with oversize vehicle turn loop; bus/van drop-off zone at entry plaza 			
Visitor Entry Plaza	N/A	 Pedestrian Entry Plaza Pedestrian paths from vehicle drop-off zone in new parking lot to Visitor Center entrance and restroom building Visitor amenities would include orientation maps and exhibits, bike racks, and a central gathering space for groups; hitching post or rail near-by 			

Table I. Alternatives—Comparison of Actions					
	BUILDINGS AND CI	RCULATION			
ALTERNATIVE A: ALTERNATIVE B: NO ACTION PREFERRED PROJECT					
	Visitor Cen	ter			
No ChangeInteragency Visitor Center• Vacant• VacantStable 6,094 sq. ft. (5,490 sq. ft ground floor)• Vacant• Modify and improve existing Stable building 					
Restroom & Storage I,000 sq. ft.	 N/A Visitors use chemical toilet behind native plant garden or drive to Dormitory 	 New Restroom Construct public restroom (men's, women's and family restroom), with storage space for outdoor exhibits, etc. 			
Print Shop 2,400 sq. ft.	No Change Maintenance office (up to 2 people) and equipment storage 	 Building Demolition and Replacement with Outdoor Visitor Serving Amenities Demolish structure and use area for picnicking and outdoor programming 			
Rustic Amphitheatre	N/A	Outdoor Program Amphitheatre Construct new amphitheatre for Visitor Center interpretive programs for up to 100 people 			
Future Expansion Multi-Purpose Visitor Building	N/A	 New Construction (future expansion) Construct 950 sq. ft. building to serve as future multi-purpose visitor-oriented facility 			

Table I. Alternatives—Comparison of Actions (continued)						
	VISITOR CENTER PRO	OGRAMS				
ALTERNATIVE A ALTERNATIVE B NO ACTION PREFERRED PROJECT						
	Educational Progr	rams				
Day Use (Group Programs) N/A New Visitor Center Day Use Programs • MRCA day use education programs continue to meet at Dormitory • 70-140 participants, Sept-June • Primarily Monday-Friday • I group/day, 3 programs /week • 8 a.m 4 p.m. • 2 buses						
	Public Program	ns				
 Tours/Hikes Guided Tours Nature Hikes (Day & Night) Interpretative Programs Campfire Programs 	 No Change Some tours/hikes continue to meet at the Dormitory (outside planning area) Bird walks and history walks continue to meet at native plant garden parking (1/month each) 	 New Visitor Center Programs Up to 40 persons/program Year-round Primarily Friday-Sunday w/ occasional weekday tour/hike 9 per week (3/day) Day tours and hikes 8 a.m. – Sunset Night hikes and programs 7 p.m. – 10 p.m. Campfire Programs Up to 100 persons; primarily weeknights; spring, summer, fall; one per week 7 p.m. – 9 p.m. 				
 Special Use Permits Company Picnics Weddings Filming/Photo Shoots 	No Change • On-going; participants and timing case-by-case basis	 Special Uses by Permit at Visitor Center Special events by permit at modified Stable and new entry courtyards Up to 200 persons Year round, primarily Fri-Sun with occasional weekday event Filming ongoing by permit, must be compatible with visitor experience and natural resource protection. 				

Table 2. Compatibility with Project Objectives			
Objective	Alternative A	Alternative B	
Preserve the unique aesthetic, historical, and cultural values of King Gillette Ranch by pursuing adaptive uses within the existing footprint of the Ranch and implementing design features compatible with the original Ranch architectural theme.	Alternative A would not meet this project objective. The No Action Alternative does not allow adaptive use of the Stable building due to its poor condition and previous unfinished attempts to remove interior load bearing walls which have left it unsafe for entry. The building would continue to deteriorate and would eventually become a moldering ruins site. Only a stabilization or reconstruction project would allow further use of the Stable building. This alternative does not prescribe a use for the Guardhouse although it remains. This alternative maintains use of the Print Shop as a maintenance shop and office.	Alternative B best achieves this objective. This alternative modifies the Stable building as a visitor center. One of the modifications is to remove a 400 sq. ft. non-conforming concrete block addition located behind the central tower. This addition was not part of the original Neff design. This design restores the original Stable building footprint and is compatible with the original architecture. This alternative removes the Print Shop, constructed in 1970, which is not compatible with the architecture of the Stable building. The proposed restroom and multi-purpose visitor services buildings, would be designed to be compatible with the original Ranch architecture. They would be constructed within a building footprint that is one-third smaller than the footprint of the Print Shop, which would be removed. The Gatehouse would remain and would be used as an office for the volunteer program.	
Protect and restore native plant communities for the benefit of the wildlife that depend on such habitats, and for the appreciation and understanding of present and future generations.	Alternative A would potentially meet this objective. In this alternative, the native plant garden remains intact as habitat for wildlife and a site for visitors. Some restoration of the creek and riparian habitat could occur on an opportunistic basis.	Alternative B best achieves this objective. This alternative removes all overflow/event parking within the project planning area from the 100- foot setback from Stokes Creek and restores two areas within this setback. The planting of several oaks as a component of the proposed riparian corridor restoration would enhance and extend the riparian habitat north of Stokes Creek and contribute to screening the creek habitat from Visitor Center activities. Long term monitoring and removal of invasive species would be beneficial for native plant communities.	

Table 2. Compatibility with Project Objectives			
Objective	Alternative A	Alternative B	
Maintain or improve water quality of Stokes Creek and manage the associated riparian habitat for its significant ecological value.	Alternative A would not achieve this project objective. The No Action Alternative allows continued overflow/special use permit parking in the vacant lot east of the Stable building and within 100 feet of Stokes Creek. There would be no change, i.e. no improvement in the water quality of riparian habitat restoration in the project planning area.	Alternative B best achieves this objective. This alternative establishes a 100-foot setback from Stokes Creek within the planning project area. By removing all overflow/event parking from within the setback and restoring two riparian areas, this alternative would protect water quality and extend riparian habitat.	
Apply sustainable design to minimize the short and long-term environmental impacts of Visitor Center development. Use resource conservation, recycling, waste minimization, and energy-efficient and ecologically responsible materials and techniques for construction when feasible.	Alternative A would not include any substantial efforts to use sustainable design principles or materials or conserve energy and resources in the project planning area. Two of the three structures in the project planning area would remain vacant (Stable building and Gatehouse) and none of them would be improved to be more energy efficient. Underutilization of facilities and their sustainable design features would continue. There would be no construction and therefore no need to minimize the short- and long- term impacts of Visitor Center development or opportunity to use sustainable practices and materials.	Alternative B would achieve this objective. This alternative would reuse an existing building, reducing both waste from building demolition and the amount of materials required for new facilities. It would include measures to reduce waste, recycle materials and reduce the carbon footprint of the construction by selecting locally or regionally sourced materials and certified forest products. Sustainable features of the design would include: 1) a 70 kW photovoltaic system to provide enough energy to meet Visitor Center needs and apply any surplus electricity for use at other Ranch buildings (net-zero), 2) a ground loop geothermal heating and cooling system, 3) Solar hot water, and 4) recycled water for irrigation. The project would be designed to achieve a LEED Platinum rating (highest possible level).	

Table 2. Compatibility with Project Objectives						
Objective Alternative A Alternative B						
Design visitor center facilities to facilitate partner agencies' operational and organizational efficiencies for SMMNRA.	Alternative A would not achieve this objective. The four agency partners would continue to operate visitor contact stations separately in locations far from each other. The central visitor center for SMMNRA would continue to operate in Thousand Oaks, far west of the population centers in Los Angeles and the San Fernando Valley. MRCA and NPS would continue to collaborate on a minimum schedule of programs at the Ranch.	Alternative B best achieves this objective. Having one centrally located visitor center in SMMNRA representing all four partner agencies would create operational efficiencies for the four partner agencies and benefits for visitors to SMMNRA. The NPS visitor center in Thousand Oaks could close. The agencies would share their talent and skills and dramatically improve service to the public with less people and fewer facilities overall.				
Provide safe and dependable access from local highways and visitor orientation for the broad and diverse public coming to visit SMMNRA, including making facilities, programs and services reasonably accessible to all people, including those with disabilities.	Alternative A would partially achieve this objective, given its convenient location off Las Virgenes Road and Mulholland Highway, and continuing operation of the existing visitor contact office and public programs. Most visitor-serving buildings in SMMNRA would remain accessible to visitors with disabilities. At the Ranch, visitors with disabilities could continue to visit the native plant garden and use the accessible chemical toilet there. None of the buildings in the project planning area are accessible, nor are they open to the public.	Alternative B best achieves this objective. The location is the same as for Alternative A, i.e. conveniently located. The proposed new Visitor Center would increase the number of visitor amenities available for people with mobility impairments. These accessible facilities would include a visitor center with orientation and interpretive exhibits, a multi- sensory theater experience, men's/women's and family restrooms, an accessible interpretive trail, amphitheater and multi- purpose visitor services building, two courtyards and a picnic area.				

Table 2. Compatibility with Project Objectives			
Objective	Alternative B		
Plan and develop appropriate recreation and education facilities and amenities necessary to promote and support an enjoyable and safe recreation experience in the national recreation area.	Alternative A would partially meet this objective. There would be no change in the amount of recreational or educational facilities at King Gillette Ranch. The project planning area would remain underutilized by education groups and recreationists due to the lack of restroom and visitor support facilities.	Alternative B best achieves this objective. Curriculum-based day use educational programs based at the Visitor Center would be established in the project planning area, more than doubling the capacity of the Ranch to accommodate day use educational programs. Interior and exterior (after hours) exhibits at the Visitor Center would provide safety messages, orientation, and trip planning information about SMMNRA's recreational opportunities, particularly the area's trails.	
Design programs and facilities that would increase visitor appreciation and awareness of the environment and historic sites within SMMNRA and their place in the story of California.	Alternative A would partially meet this objective. Under this alternative there would be no change in the number of programs or visitor facilities or in the location of orientation facilities. Visitors would continue to explore King Gillette Ranch on their own without orientation and interpretive exhibits that could deepen their appreciation and awareness of the environment. For an overall orientation to SMMNRA, visitors would continue to travel out of their way to NPS headquarters in Thousand Oaks or they would not receive an orientation or trip planning assistance.	Alternative B best achieves this objective. Through interpretive exhibits and programs at a centrally located full-service visitor center there would be a dramatic increase in the number of visitors experiencing these programs and using these exhibits. As a result, there would be an overall increase in visitor appreciation and awareness of the environment and historic sites within SMMNRA compared to the current situation.	

	Table 3. Alternatives— Impact Summary			
Impact Topic	Alternative A	Alternative B		
	No Action Alternative	Preferred Alternative		
Accessibility for Individuals with	Project Specific: adverse, moderate, long-term, local impacts	Project Specific: beneficial, moderate, long-term, regional impacts		
Disabilities	Cumulative: beneficial, moderate, long- term, regional (SMMNRA-wide) impacts	Cumulative: beneficial, moderate, long- term, regional impacts		
Aesthetics / Visual Resources	Project Specific: continuing adverse, negligible to minor, short-term and long-term, local impacts Cumulative: adverse, moderate, long- term, and regional (SMMNRA-wide) impacts	Project Specific: adverse, short-term, minor, local construction impacts; beneficial, minor, long-term, local impact on visual resources; adverse, minor, short-term and long-term, local impacts on the lighting and noise aspects.		
		Cumulative: adverse, minor, long-term, regional impacts		
Air Quality	Project Specific: continuing adverse, negligible, short-term, local and regional, impacts Cumulative: adverse, negligible, short- and long-term, regional impacts	Project Specific: adverse, minor, short- term, and local construction-related impacts, and beneficial, minor, long- term, and regional operation-related impacts		
		Cumulative: short-term negligible adverse impacts to air quality during construction; adverse, negligible, long- term, regional impact with project contributing negligibly beneficial impacts.		
Archaeological	Project Specific:	Project Specific:		
and Ethnographic Resources	Archaeologic and Ethnographic: adverse, minor, long-term, local impacts	Archaeologic and Ethnographic: adverse, minor, long-term, local impacts		
	Cumulative: adverse, minor, long-term, local impacts	Cumulative: adverse, minor, long-term, local impacts		

Table 3. Alternatives— Impact Summary			
Impact Topic	Alternative A	Alternative B	
	No Action Alternative	Preferred Alternative	
Energy Use, Conservation Potential, and Sustainable Design	Project Specific: adverse, negligible, long-term, local impacts Cumulative: adverse, moderate, long- term, regional impact	Project Specific: beneficial, moderate, long-term, local impacts Cumulative: adverse, moderate, long- term, regional impacts owing to ongoing adverse impacts of extensive past non-"green" development practices	
Land Use	Project Specific: no impacts Cumulative: adverse, moderate, long- term, local impact	Project Specific: no impacts Cumulative: adverse, minor, long-term, local impacts	
Park Operations	Project Specific: no impacts Cumulative: no cumulative impacts	Project Specific: adverse, moderate, short-term, local construction-related impacts; adverse, moderate, long-term, local operation-related impacts Cumulative: adverse, moderate, long- term, local impacts	
Public Health and Safety	Project Specific: adverse, moderate, long-term, local impacts from fire; no impacts from flooding; adverse, moderate, long-term, local impacts from seismic shaking; no impacts from hazardous materials Cumulative: adverse, moderate, long- term, and regional for natural disasters; adverse and negligible from exposure to hazardous materials	Project Specific: beneficial, minor, short-term, local impacts from fire; no impacts from flooding; adverse, minor, long-term, local impacts from seismic shaking; beneficial, minor, long-term, and local impacts associated with removal of hazardous materials from site; adverse, negligible-to-minor, short- term, local impacts on visitor safety during construction Cumulative: adverse, negligible to moderate, long-term, regional impacts	

Table 3. Alternatives— Impact Summary			
Impact Topic	Alternative A	Alternative B	
	No Action Alternative	Preferred Alternative	
Soils	Project Specific: beneficial, negligible, long-term, local impacts	Project Specific: adverse, minor, long- term, local impacts	
	Cumulative: adverse, long-term, moderate, regional	Cumulative: adverse, minor, long-term, regional	
Transportation	Project Specific: adverse, negligible, long-term, and local impacts on weekday traffic; adverse, minor, long- term, and local impacts on weekend traffic; no impacts to public transportation	Project Specific: adverse, negligible, long-term, local impacts for weekday traffic; adverse, minor to moderate, long-term, and local impacts on weekend traffic; no impacts to public transportation	
	Cumulative: adverse, minor, long-term, regional impacts	Cumulative: adverse, minor, long-term, regional impacts	
Utilities and Service Systems	Project Specific: no impacts Cumulative: adverse, minor, long- term, regional impacts	Project Specific: beneficial, minor, long- term, local impacts Cumulative: adverse, minor, long-term, regional impact	
Vegetation	Project Specific: adverse, minor, long- term, regional impacts Cumulative: adverse, negligible to minor, localized impacts	Project Specific: beneficial, moderate, long-term, local impacts on oak trees as mitigated; adverse, minor, long-term, local impacts within non-native grassland; adverse, moderate, long- term, local impacts on eucalyptus trees along the entrance road Cumulative: adverse, moderate, long- term, and regional (SMMNRA-wide) impacts	

Table 3. Alternatives— Impact Summary			
Impact Topic	Alternative A No Action Alternative	Alternative B Preferred Alternative	
Visitor Use and Experience	Project Specific: adverse, minor, long- term, regional impacts Cumulative: adverse, moderate, long- term, regional impacts	Project Specific: adverse, minor, short- term, local construction-related impacts; beneficial, major, long-term, regional operation-related impacts Cumulative: beneficial, major, long- term, regional impacts	
Water Resources	Project Specific: adverse, negligible, long-term, local impacts on water quality; no impacts on wetlands or waters of the U.S.; no impacts on downstream flooding Cumulative: adverse, minor, long- term, regional impacts	Project Specific: adverse, negligible, short-term, and local impacts during construction; beneficial, minor, long- term, local impacts on wetlands and waters of the U.S. during operation; no impacts on downstream flooding Cumulative: adverse, minor, long-term, regional impacts	
Wildlife, and Threatened, Endangered, and Other Sensitive Species	Project Specific: adverse, negligible to minor, local long-term impacts on wildlife; is not likely to adversely affect threatened, endangered, or otherwise sensitive species; no adverse effects on essential fish habitat Cumulative: adverse, minor, short- and long-term, regional impacts; is not likely to adversely affect threatened, endangered, or otherwise sensitive species	Project Specific: adverse, minor, short- term, local construction-related impacts; adverse, negligible to minor, long-term, local impacts from operation; beneficial, minor, long-term, local impacts from riparian habitat restoration; is not likely to adversely affect threatened, endangered, or otherwise sensitive species; no adverse effects on essential fish habitat Cumulative: adverse, minor, short- and long-term, regional impacts; is not likely to adversely affect threatened, endangered, or otherwise sensitive species	

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes the affected environment and the environmental consequences associated with the alternatives. It is organized by impact topics to allow a standardized comparison between alternatives based on issues. The affected environment describes the resources that may potentially be affected by the proposed Visitor Center. The environmental consequences section analyzes what potential impacts may occur to those resources.

3.1 Methodology

This section contains the methods and criteria used to assess impacts for specific resource topics. The descriptions for impacts are consistent with NEPA and the CEQ's impact guidelines for all analyzed topics. Slightly differing impact description terms are also described and used, where applicable, in accordance with Section 106 of the National Historic Preservation Act (NHPA) and Section 7 of the Endangered Species Act (ESA).

When crafting the establishing legislation for Santa Monica Mountains National Recreation Area, Congress considering the interagency jurisdictional setting. The establishing legislation accounts for the role that local and state government would have in managing land use in the Santa Monica Mountains to protect and preserve park resource values.

"...the State of California and its local units of government have authority to prevent or minimize adverse uses of the Santa Monica Mountains and adjacent coastline area and can, to a great extent, protect the health, safety, and general welfare by the use of such authority" (P.L. 95-625, Sec. 507(3)).

The NPS manages SMMNRA in cooperation with state and local governments. The partner agencies have been working together to manage SMMNRA under a Cooperative Management Agreement (CMA) since 1995. Most recently, an addendum was adopted and added to the CMA in 2008 to identify joint management of King Gillette Ranch and pursue design and construction of an interagency Visitor Center at the Ranch. Therefore, the following impact analyses consider, to the extent feasible, the regulatory needs of the state and local partner agencies.

The proposed Visitor Center construction at King Gillette Ranch would be a federal action within the California Coastal Zone, thus requiring NPS compliance with the federal Coastal Zone Management Act. Thus, the following impact analyses consider the potential for impacts to coastal resources as measured against policies in Chapter 3 of the California Coastal Act (CPRS, 1976). As part of this EA, NPS will also prepare a Consistency Determination with a request for concurrence from the California Coastal Commission.

Finally, in deference to the interagency setting of the national recreation area among two counties and several local municipalities, NPS considers and implements other local land use policies and regulations to the maximum extent feasible.

The impact analyses were based on information provided by park staff, relevant references and technical literature citations, and subject matter experts.

3.1.1 Impact Descriptors

National Environmental Policy Act (NEPA)

National Environmental Policy Act (NEPA) requires consideration of the type, context, duration, and intensity of impacts. Additionally, NEPA requires evaluation of cumulative impacts. Descriptions of each kind of impact follow.

Type of Impact is a measure of whether the impact would improve or harm the resource and whether the impact occurs immediately or at some later point in time.

- Adverse: creates or antagonizes a harmful resource condition.
- Beneficial: creates an advantageous resource condition or reverses a harmful condition.
- Direct: caused by and occurring at the same time and place as the action.
- Indirect: caused by the action, but occurring later in time or at another place or to another resource.

Context is a measure of the geographic extent of potential impacts.

- Localized: impact remains within the immediate project area.
- Regional: impact expands to other areas of the national recreation area or beyond.

Duration is a measure of how long the impact would persist.

• Short-term or long-term, with varying timeframes based on the affected resource.

Intensity is a measure of how serious the impact might be. NEPA assigns four levels of intensity: negligible, minor, moderate, and major. The thresholds for these four terms depend on the impact analysis topic. Table 4 describes impact thresholds for the topics analyzed in this EA. The thresholds are based on NEPA generalizations for the four levels, intensity thresholds described in the SMMNRA GMP, and in consultation with NPS subject matter experts.

Cumulative impacts result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (CEQ 1508.7). In SMMNRA the following groups of cumulative impact contributors are considered as applicable to each impact topic.

Table 4. Impact Intensity Thresholds					
Impact Topic	Negligible	Minor	Moderate	Major	Duration
Accessibility for Individuals with Disabilities	Accessibility for individuals with disabilities would not be affected, or effects would not be noticeable or measurable.	Changes in accessibility would be noticeable, but would affect only a small portion of the individuals with mobility- related disabilities who use the park.	Changes in accessibility would be readily apparent to many of the individuals with mobility- related disabilities who use the park.	The effects on accessibility would be readily apparent to most of the individuals with mobility-related disabilities who use the park and would substantially change their ability to access park features.	Short-term – Effects occur only during project implementation activities. Long-term – Effects extend beyond project implementation activities.
Aesthetics	Impacts are barely perceptible and not measurable; confined to small area.	Impacts are perceptible and measurable; remain localized and confined to a small area.	Impacts are sufficient to cause a change in character-defining feature and/or scenic corridor; involves a single or small group of contributing elements and/or individually significant visual features.	Impacts result in a substantial and highly noticeable change in character- defining features and/or scenic corridors; involves a large group of contributing elements and/or individually significant visual features.	Short-term – Effects last only for the duration of project implementation. Long-term – Effects last beyond the period of project implementation.
Aesthetics - Noise	Impacts from noise pollution caused by	Impacts from noise pollution caused by	Impacts are sufficient to cause annoyance, and	Impacts result in annoyance, negative	Short-term – Occurs only during the duration

	Table 4. Impact Intensity Thresholds					
Impact Topic	Negligible	Minor	Moderate	Major	Duration	
	proposed construction activities would be unnoticeable above current background noise levels.	proposed construction activities would be perceptible above background conditions but would not interfere with visitor enjoyment.	visitor enjoyment is negatively impacted.	visitor experience, and interference with regular conversational speech.	of the project. Long-term – Persists beyond the duration of the project.	
Air Quality	Impacts from air pollution caused by proposed activities above background conditions are unnoticeable to the most sensitive individuals.	Impacts from air pollution caused by proposed activities are perceptible above background conditions only to the most sensitive individuals but do not cause adverse reactions.	Impacts are sufficient to cause sensitive people to feel effects of air pollution, such as eyes watering and/or coughing, and start to cause visibility impairment inside the construction site boundary.	Impacts result in substantial health effects to sensitive people such as shortness of breath or asthma attacks, and visibility impairment is noticeable outside construction site boundaries.	Short-term – Effects last only for the duration of project implementation. Long-term – Effects last beyond the period of project implementation.	
Archaeological and Ethnographic Resources Note: Section 106 of the National Historic Preservation Act	Impact is at the lowest levels of detection with neither adverse nor beneficial consequences and would neither alter resource conditions, such as traditional access or site	Disturbance of a site results in little, if any, loss of integrity and would neither appreciably alter resource conditions, such as traditional access or site	Disturbance of a site results in loss of integrity that would interfere with traditional access, site preservation, or the relationship between the resource and the affiliated group's	Disturbance of a site results in loss of integrity that would block or greatly affect traditional access, site preservation, or the relationship between the resource and the	Short-term – Effects on the natural elements of a cultural landscape may be less than a year until new vegetation grows or historic plantings are restored.	

	Table 4. Impact Intensity Thresholds					
Impact Topic	Negligible	Minor	Moderate	Major	Duration	
requires use of the italicized specific wording when quantifying potential effects on historic cultural resources.	preservation, nor the relationship between the resource and the affiliated group's body of practices and beliefs. <i>No Adverse Effect</i>	preservation, nor the relationship between the resource and the affiliated group's body of practices and beliefs <i>No Adverse Effect</i>	practices and beliefs, even though the group's practices and beliefs would survive. Adverse Effect	affiliated group's body of practices and beliefs, to the extent that the survival of a group's practices and/or beliefs would be jeopardized. Adverse Effect	Long-term – Because most cultural resources are essentially nonrenewable, any effects on archeological, historic, or ethnographic resources would be long-term. Effects on the cultural landscape would persist for more than one year.	
Energy Use, Conservation Potential, and Sustainable Design	Energy use would not be affected, or the effect would be at or below levels of detection and would not have an appreciable effect on park operations. Sustainability within the project area would not be affected, or effects would not be measurable outside of normal variability.	The effect would be detectable but would not be of a magnitude that it would appreciably change energy use. If mitigation were needed to offset adverse effects, it would be relatively simple and likely successful. Effects on sustainability within the project area would be small but detectable. If effects were adverse,	The effects would be readily apparent and would result in a substantial change in energy use in a manner noticeable to staff and the public. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful. Effects on sustainability within the project area would be	The effects would be readily apparent and would result in substantial change in energy use in a manner noticeable to staff and the public and markedly different from existing operations. Mitigation measures to offset adverse effects would be needed, and their success would not be assured. Effects on	Short-term – Changes last for less than ten years. Long-term – Changes persist beyond ten years.	

	Table 4. Impact Intensity Thresholds						
Impact Topic	Negligible	Minor	Moderate	Major	Duration		
		simple mitigation would be needed and would be successful.	readily apparent. Changes in the ability to manage would be considerable and apparent. If effects were adverse, mitigation would probably be necessary to offset adverse effects and would likely be successful.	sustainability of the project area would be readily apparent and would substantially change the degree of sustainable design or materials across the entire project area. Changes in long-term management would be far-reaching. If effects were adverse, extensive mitigation measures would be needed to offset adverse effects, and their success would not be assured.			
Land Use	Impacts would occur if effects were not detectable and would have no discernible effect on land use patterns or land use compatibility.	Impacts would result if effects were slightly detectable, but would not be expected to have an overall effect on land use patterns or land use compatibility.	Impacts would occur if impacts were clearly detectable and could have an appreciable effect on land use patterns and result in land use incompatibility.	Impacts would occur if effects would have a substantial highly noticeable land use incompatibility or would result in substantial changes to land use patterns.	Short-term – Occurs only during the duration of the project. Long-term – Persists beyond the duration of the project.		

	Table 4. Impact Intensity Thresholds						
Impact Topic	Negligible	Minor	Moderate	Major	Duration		
Park Operations	Park operations would not be affected, or the effect would be at or below levels of detection and would not have an appreciable effect on park operations.	The effect would be detectable but would not be of a magnitude that it would appreciably change park operations. If mitigation were needed to offset adverse effects, it would be relatively simple and likely successful.	The effects would be readily apparent and would result in a substantial change in park operations in a manner noticeable to staff and the public. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful.	The effects would be readily apparent and would result in substantial change in park operations in a manner noticeable to staff and the public and markedly different from existing operations. Mitigation measures to offset adverse effects would be needed, and their success would not be assured.	Short-term — Occurs only during the duration of construction. Long-term — Persists during operation of the project.		
Public Health and Safety	Impacts are not detectable and would have no discernible effect on public safety.	Impacts are present but are not expected to have an overall effect on public safety.	Impacts are clearly detectable and could have an appreciable effect on public safety.	Impacts would have a substantial, highly noticeable influence on public safety.	Short-term – Effects last only for the duration of project implementation. Long-term – Effects last beyond the period of project implementation.		
Soils	Impacts that are not detectable and would have no discernible	Impacts are present but are not expected to have an overall effect on	Impacts are clearly detectable and could have an appreciable	Impacts would have a substantial, highly noticeable influence on	Short-term – Following completion of the project, recovery would		

	Table 4. Impact Intensity Thresholds					
Impact Topic	Negligible	Minor	Moderate	Major	Duration	
	effect on public safety and soil resources.	public safety or soil resources.	effect on public safety and soil resources.	public safety and soil resources.	take less than one year. Long-term – Following completion of the project, recovery would take more than one year.	
Traffic and Transportation	Impacts that are not detectable and would have no discernible effect on transportation infrastructure or its operation.	Impacts are present but are not expected to have an overall effect on transportation infrastructure or its operation.	Impacts are clearly detectable and could have an appreciable effect on transportation infrastructure or its operation.	Impacts would have a substantial, highly noticeable influence on transportation infrastructure or its operation.	Short-term – Occurs only during the duration of the project. Long-term – Persists beyond the duration of the project.	
Utilities and Service Systems	Impacts that are not detectable and would have no discernible effect on utility infrastructure or its operation.	Impacts are present but are not expected to have an overall effect on utility infrastructure or its operation.	Impacts are clearly detectable and could have an appreciable effect on utility infrastructure or its operation.	Impacts would have a substantial, highly noticeable influence on utility infrastructure or its operation.	Short-term – Occurs only during the duration of the project. Long-term – Persists beyond the duration of the project.	
Vegetation	Individual native plants	Effects on native plants	A change would occur	Effects on native plant	Short-term – Following	

	Table 4. Impact Intensity Thresholds						
Impact Topic	Negligible	Minor	Moderate	Major	Duration		
	may be affected, but measurable or perceptible changes in plant community size, integrity, or continuity would not occur.	would be measurable or perceptible, but would be localized within a small area. The viability of the plant community would not be affected, and the community, if left alone, would recover.	to the native plant community over a relatively large area that would be readily measurable in terms of abundance, distribution, quantity, or quality. Mitigation measures to offset or minimize adverse effects would be necessary and would likely be successful.	communities would be readily apparent and would substantially change vegetative community types over a large area. Extensive mitigation would be necessary to offset adverse effects, and their success would not be assured.	completion of the project, recovery would take less than one year. Long-term – Following completion of the project, recovery would take more than one year.		
Visitor Use and Experience	Impacts are not detectable to the visitor and therefore are not expected to have an overall effect on the visitor experience.	Impacts would be slightly detectable, though are not expected to have an overall effect on the visitor experience.	Impacts are clearly detectable to the visitor and would have a substantial effect on the visitor experience.	Impacts would have a substantial, highly noticeable influence on the visitor experience and could permanently alter access to, and availability of, various aspects of the visitor experience.	Short-term – Effects occur only during project implementation activities. Long-term – Effects extend beyond project implementation activities.		
Water Resources	Impacts that are not detectable and would have no discernible	Impacts on hydrologic processes that are slightly detectable but	Impacts are clearly detectable and could have an appreciable	Impacts would have a substantial, highly noticeable influence on	Short-term – Following completion of the project, recovery would		

	Table 4. Impact Intensity Thresholds						
Impact Topic	Negligible	Minor	Moderate	Major	Duration		
	effect on the hydrology or quality of waterbodies.	are not expected to have an overall effect on the character of waterbodies or floodplains.	effect on hydrologic processes, the adjacent floodplain, or water quality.	the hydrologic environment and could permanently alter hydrologic processes, floodplain formation and evolution, and water quality.	take less than one year. Long-term – Following completion of the project, recovery would take more than one year.		
Wildlife	Wildlife and their habitats would not be affected, or the effects would be at or below the level of detection and would not be measurable or of perceptible consequence to wildlife populations.	Effects on wildlife or habitats would be measurable or perceptible, but localized within a small area. While the mortality of individual animals might occur, the viability of wildlife populations would not be affected, and the community, if left alone, would recover.	A change in wildlife populations or habitats would occur over a relatively large area. The change would be readily measurable in terms of abundance, distribution, quantity, or quality of population. Mitigation measures would be necessary to offset adverse effects, and would likely be successful.	Effects on wildlife populations or habitats would be readily apparent, and would substantially change wildlife populations over a large area in and out of the national park. Extensive mitigation would be needed to offset adverse effects, and the success of mitigation measures could not be assured.	Habitats and populations: Short-term – Recovers in less than one year after project completion. Long-term – Takes more than one year to recover after project is complete.		
Wildlife - Threatened or Endangered, and	<i>No Effect</i> : Impacts would not affect listed, protected or other	May Affect / Is Not Likely to Adversely Affect: Effects on special status species	May Affect / Likely to Adversely Affect: Adverse effects on a listed	Likely to jeopardize the continued existence of a species / Adversely modify	Plants and animals: Short-term – Recovers		

	Table 4. Impact Intensity Thresholds					
Impact Topic	Negligible	Minor	Moderate	Major	Duration	
other Species of Concern and Critical Habitat Note: Section 7 of the Endangered Species Act requires use of the italicized specific wording when quantifying potential effects on listed species.	sensitive species or their critical habitat.	and critical habitat would be discountable (i.e., adverse effects are unlikely to occur or could not be meaningfully measured, detected, or evaluated) or completely beneficial.	species and critical habitat might occur as a direct or indirect result of the proposed action, and the effect would either not be discountable or would be completely beneficial. Moderate impacts on species would result in a local population decline due to reduced survivorship, declines in population, and/or a shift in the distribution; no direct casualty or mortality would occur.	<i>critical habitat:</i> Effects could jeopardize the continued existence of a listed or proposed species or adversely modify designated critical habitat within and/or outside the park boundaries. Major impacts would involve a disruption of habitat and breeding grounds of a protected species such that direct casualty or mortality would result in removal of individuals of a protected species from the population.	in less than one year. Long-term – Takes more than one year to recover.	

- Suburban Residential and Commercial Development. The Santa Monica Mountains are a highly desirable place to live, and Congress always envisioned that public parkland and private development would have to coexist. In the late 1980s and early 1990s, a development boom occurred that suburbanized the upper Malibu Creek Watershed above King Gillette Ranch, represented now by the communities of Calabasas, Agoura Hills, and Oak Park. The development impacted SMMNRA by removing significant amounts of native habitat, adding expanses of impervious surfaces that prevent water infiltration, and adding traffic to the local highways that cross the mountains. The new communities also brought new residents, many of whom who chose the communities to pursue a lifestyle that includes views from their homes toward the scenic parkland areas and regular use of the public recreational trail network. The residents are generally supportive of the park management needs and the proposed actions of the partner agencies. Development also occurred along the coast in Malibu, although not at the surburban subdivision scale as in the upper Malibu Creek Watershed. Several reasonably foreseeable development projects are proposed in Calabasas, Agoura Hills, Malibu, and unincorporated areas of Los Angeles County in the vicinity of King Gillette Ranch. Appendix B lists reasonably foreseeable projects considered in the evaluation of cumulative impacts of the proposed project, most of which are at the suburban level.
- Rural Estate Development. The previously mentioned development boom constructed mostly highdensity residential subdivisions and commercial projects. Since the end of the development boom, more recent projects have proposed large, single-family estates in remote, as yet undeveloped areas in SMMNRA still in private ownership. The proposed residences call for long, new driveways to the building site, and some would require mile-long extensions of municipal water lines. Development of such residences contributes to habitat fragmentation to the detriment of wildlife movement and with introduction of non-native plant species into previously pristine area. Scenic resources are also lost, with the transformation of previously unobstructed mountainsides and ridgelines into development, including associated fuel modification zones that can create a minimum four-acre disturbance footprint for each residence.
- Public Land Acquisition. Public parkland acquisition has been ongoing since the establishment of SMMNRA in 1978. At that time, approximately 33,000 acres had been acquired, mostly for the major state parks within SMMNRA. Current public parkland ownership is just over 83,000 acres, with NPS owning 23,302 of those acres. Parkland acquisition comes with new management responsibilities, ranging from trail maintenance to law enforcement patrolling. Some new acquisitions have included buildings and other structures that require routine and cyclic maintenance. Land acquisition will continue into the future, with roughly a minimum of 12,000 acres more to be acquired to accomplish park goals for habitat connectivity and completion of regional trails.
- Other Park Management Plans and Projects. The proposed King Gillette Ranch Design Concept Plan (DCP), is a joint federal and state action to prepare a long-range vision for the use of the full 588acre Ranch. The DCP would address trail connections and use designation, management zoning and prescriptions for education and administration and natural areas, and would identify uses for

each of the existing buildings. All the proposed actions would work in conjunction with operation of the Visitor Center by contributing additional interpretive programs for participants who would benefit from visitor center exhibits and visitor-serving amenities. Preparation of the DCP is planned to move forward again beginning in summer, 2010. The partner agencies have also been working on preparing the *SMMNRA Interagency Trail Management Plan (TMP)*, a plan for the future vision of the public trail network. The TMP would propose management policies for existing trails and propose new trail construction, along with other trail-related facilities including trailheads and backcountry trail camps along the 65-mile Backbone Trail. The TMP would include all existing and proposed trails within and adjacent to King Gillette Ranch. The *Diamond X Ranch Student Intern Center* is currently under construction and located approximately one-half mile from the project planning area. The student intern center will house up to 16 persons, and has been designed to achieve a LEED gold-equivalent rating, but not as a formal certification.

National Historic Preservation Act, Section 106

Cultural resources impacts are also initially characterized as noted above for NEPA. However, the conclusion follows the format below, and makes a formal determination of effect under Section 106 of the National Historic Preservation Act. In accordance with National Park Service *Management Policies* (2006), the analysis in this EA fulfills the responsibilities of the National Park Service under Section 106 of the National Historic Preservation Act.

No Effect: There are no historic properties in the Area of Potential Effect (APE); or, there are historic properties in the APE, but the undertaking would have no impact on them.

No Adverse Effect: There would be an effect on the historic property by the undertaking, but the effect does not meet the criteria in 36 CFR Part 800.5(a)(1) and would not alter characteristics that make it eligible for listing on the National Register. The undertaking may be modified or conditions imposed to avoid or minimize adverse effects. This category of effects is encumbered with effects that may be considered beneficial under NEPA, such as restoration, stabilization, rehabilitation, and preservation projects.

Adverse Effect: The undertaking would alter, directly or indirectly, the characteristics of the property, making it ineligible for listing on the National Register. An adverse effect may be resolved by developing a memorandum or program agreement in consultation with the SHPO, ACHP, American Indian tribes, other consulting parties, and the public to avoid, minimize, or mitigate the adverse effects (36 CFR Part 800.6(a)).

Special Status Species – Endangered Species Act (Section 7)

Potential impacts to listed, proposed for listing, or other species recognized as sensitive are assessed by first identifying species that may occur within or adjacent to the project planning area and how they might be using resources within the area. Next, the intensity and duration of potential impacts is evaluated. Impact level terms specified in Section 7 of the Endangered Species Act are assigned, rather than the typical NEPA terms (i.e. negligible, minor, moderate, or major).

No Effect: The project (or action) is located outside suitable habitat and there would be no disturbance or other direct or indirect impacts on the species. The action would not affect the listed species or its designated critical habitat (USFWS 1998).

May Affect, Not Likely To Adversely Affect: The project (or action) occurs in suitable habitat or results in indirect impacts on the species, but the effect on the species is likely to be entirely beneficial, discountable, or insignificant. The action may pose effects on listed species or designated critical habitat, but given circumstances or mitigation conditions, the effects may be discounted, insignificant, or completely beneficial. Insignificant effects would not result in "take" of the species. Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not 1) be able to meaningfully measure, detect, or evaluate insignificant effects or 2) expect discountable effects to occur (USFWS 1998).

May Affect, Likely To Adversely Affect: The project (or action) would have an adverse effect on a listed species as a result of direct, indirect, interrelated, or interdependent actions. An adverse effect on a listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions and the effect is not discountable, insignificant, or beneficial (USFWS 1998).

3.1.2 Resource Protection Measures

Under the Preferred Alternative, best management practices and mitigation measures would be used to prevent or minimize potential adverse effects associated with the project. These practices and measures would be incorporated into the project construction documents and plans. Resource protection measures undertaken during project implementation would include, but would not be limited to, those listed in Table 5. The impact analyses in the following Impact Analysis section were performed assuming that these best management practices and mitigation measures would be implemented.

	Table 5. Resource Protection Measures							
Resour	Resource Topic / Resource Protection Measure Timing Responsible Party/Monitoring							
Genera	l Considerations							
GEN-I	The NPS and/or MRCA project manager would ensure that the project remains confined within the parameters established in the compliance documents and that mitigation measures would be properly implemented.	All Phases	NPS Project Manager MRCA Project Manager					
GEN-2	All necessary federal, state, and local permits, project plan checks, consultations, and any other pre-construction regulatory jurisdictional approvals should be obtained prior to construction.	Design	NPS Project Manager NPS and MRCA Staff					
GEN-3	A hazardous spill plan would be in place, stating what actions would be taken in the case of a spill and the preventive measures to be implemented, such as placement of refueling facilities, storage, and handling hazardous materials, etc.	Construction	Construction Contractor					
GEN-4	Construction zones would be identified and flagged before beginning construction, and all disturbance would be confined to the flagged areas. All project personnel would be instructed that their activities must be confined to locations within flagged areas, and all equipment, materials, and stockpiled soils must remain within these areas. Disturbance beyond the construction zones would be prohibited. The only exception would be to set up and maintain necessary temporary structures, such as silt control barriers, that may be outside designated construction zones. Construction fencing installed for archaeological resource protection, migratory bird protection, erosion control, or for any other resource protection purpose, would be	Construction	NPS Project Manager Construction Contractor NPS Staff					

	Table 5. Resource Protection Measures				
Resour	Timing	Responsible Party/Monitoring			
	inspected by NPS staff prior to construction.				
GEN-5	Flagging, fencing, and other barricades should be located to protect visitor safety and to guide public access during construction. An adequate safety zone should be established to protect visitors from falling or flying debris, from contact with construction equipment and building materials, and as much as feasible, from noise generated by construction. Alternative access routes for the public and park staff should be identified and posted as necessary to guide staff away from the construction zone.	Construction	NPS Project Manager NPS Safety Officer Construction Contractor		
GEN-6	All trucks hauling demolition debris and other loose materials that could spill onto paved surfaces would be covered or would maintain adequate freeboard.		Construction Contractor		
GEN-7	Staging for construction vehicles and equipment would be located in previously disturbed areas approved by NPS, outside of high visitor use areas, and would be clearly identified in advance.	Construction	NPS Project Manager Construction Contractor		
GEN-8	All equipment on the project site would be maintained in accordance with regulatory and manufacturers' standards and kept in a clean and well-functioning state to avoid or minimize contamination from automotive fluids, exhaust emissions, and unnecessary noise.	Construction	Construction Contractor		
GEN-9	Construction vehicle engine idling would be limited to reduce construction equipment	Construction	Construction		

	Table 5. Resource Protection Measures				
Resourc	Responsible Party/Monitoring				
	emissions.		Contractor		
GEN-10	Best Management Practices (BMPs) would be used to reduce spills from refueling, during overnight parking, and any other activities that may release petroleum products into the environment.	Construction	Construction Contractor		
GEN-11	All fuel, transmission, or brake fluid leaks, or other hazardous waste leaks, spill, or releases would be reported immediately to the designated NPS and/or MRCA safety officer. The construction contractor should be responsible for spill material removal and disposal to an approved off-site landfill and, if necessary, would notify the appropriate federal agency. The NPS Safety Officer is responsible for overseeing the clean-up effort.	Construction	Construction Contractor NPS and/or MRCA Safety Officer		
GEN-12	All tools, equipment, barricades, signs, surplus materials, and rubbish would be removed from the project work limits upon project completion. Any asphalt or concrete surfaces damaged due to work on the project would be repaired to original condition. All demolition debris would be removed from the project site.	Construction	Construction Contractor		
Aesthet	ics and Visual Resources				
AES-1	The character of the existing Stable building should be retained to the maximum extent feasible during modification and/or rehabilitation. Final plans for modification of the Stable building and new attached trellis and structures, widening of the entry gate, walls and entrance road, and all exterior renovation/rehabilitation to structures dating from 1926-1952 Gillette-Brown era	Design	NPS Project Manager Design/Architectural		

	Table 5. Resource Protection Measures				
Resource Topic / Resource Protection Measure Timing Responsible Party/Monitoring					
	should be reviewed by NPS Pacific West Region cultural resource professionals.		Contractor		
			NPS PWR Cultural Resource Professionals		
AES-2	Building materials and colors for the proposed new restroom/storage structure and the future	Design	NPS Project Manager		
	multi-purpose structure should be compatible with the character of the Stable building. Glare should be reduced to the extent feasible by using non-reflective paint.		Design/Architectural Contractor		
AES-3	The project landscaping should consist of drought-tolerant native and/or Mediterranean-type	Design	NPS Project Manager		
	species which adequately screen the project site from surrounding land uses while also maintaining compatibility with the character of the Gillette-Brown era landscape features and the architectural style of the Stable building.		Design/Architectural Contractor		
			MRCA Project Manager		
AES-4	Visitor Center Services Area and parking lot exterior night lighting should be of low intensity,	Design	NPS Project Manager		
	low glare, and low height design, and shielded to direct light downward and prevent spillover into the night sky or onto adjacent properties. NPS Night Sky Policies should be followed (http://www.nature.nps.gov/air/lightscapes/lighting.cfm)		Design/Architectural Contractor		
	• Use outdoor lights only where they are needed.		MRCA Project Manager		

	Table 5. Resource Protection Measures					
Resource Topic / Resource Protection Measure			Responsible Party/Monitoring			
	• Direct all light downward by using shielded lights and aiming them down.					
	• Use motion sensors and timers to insure lights are on only when needed.					
	• Use the right amount of light, not too much, not too little.					
	• In darker areas, use less light to prevent disrupting night vision.					
AES-5	Lighting for permitted special events should be contained within the Visitor Center Services Area and the Stable building courtyard. Lighting requests beyond typical "ambience" string lighting or similar low-wattage lighting should be evaluated by partner agencies for potential assignment of special permit conditions on location, intensity, and duration of the requested lighting. For wildlife protection, artificial lighting should not be used within 100 feet of Stokes Creek, and should always be shielded and directed away from the creek.	Operation	NPS and MRCA Staff			
AES-6	Lighting for permitted filming within the Visitor Center project planning area should be reviewed by partner agencies for assignment of special permit conditions on location, intensity, and duration of the requested lighting.	Operation	NPS and MRCA Staff			
AES-7	Interior lighting of Visitor Center Services Area structures should be turned off, or dimmed as much as possible for security purposes, and blinds or other window treatments closed to reduce light spillover through windows.	Operation	NPS and MRCA Staff			

	Table 5. Resource Protection Measures				
Resource Topic / Resource Protection Measure			Responsible Party/Monitoring		
AES-8	Construction hours should be restricted to 7:00 am to 5:00 pm, with no work occurring on Saturdays, Sundays, and federal or state holidays. If deemed necessary, work may occur after hours or on prohibited days with prior written approval from NPS. Noisy construction, i.e. above 76 A- weighted decibels (dBA), such as operation of jackhammers and other heavy equipment, would remain limited to daylight hours.	Construction	NPS Project Manager Construction Contractor		
AES-9	Programs and permitted special events that would require public address systems or amplified sound systems should occur only between 9:00 am and 8:00 pm. The systems should be directed away from neighboring sensitive receptors to minimize the level of noise at the nearest residences and at Malibu Creek State Park. For events continuing after 8:00 p.m., sound systems may be allowed if noise levels are not perceptible at distances greater than 750 feet from the Visitor Center and would not inhibit wildlife's ability to hear each others' calls, to nest without noise harassment, or to hear approaching predators.	Operation	NPS Staff MRCA Staff		
Air Qu	ality				
AQ-I	 Fugitive Dust. Consistent with SCAQMD Rule 403, it is recommended that fugitive dust generated by grading and construction activities be kept to a minimum with a goal of retaining dust on the site, by following the dust control measures listed below: a. During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems should be used to prevent dust from leaving the site and to create a crust after each day's activities cease. 	Construction	NPS Project Manager Construction Contractor		

ce To	opic / Resource Protection Measure	Timing	Responsible Party/Monitorir
b.	During construction, water truck or sprinkler systems should be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas later in the morning and after work is completed for the day and whenever winds exceed 15 miles per hour.		
c.	Soil stockpiled for more than two days should be covered, kept moist, or treated with soil binders to prevent dust generation.		
d.	Reduce speeds on unpaved roads to less than 15 miles per hours.		
e.	Halt all grading and excavation operations when wind speeds exceed 25 miles per hour.		
f.	Dirt and debris spilled onto paved surfaces at the project site and on the adjacent roadways should be swept, vacuumed, and/ or washed at the end of each workday.		
g.	Should minor import/ export of soil materials be required, all trucks hauling dirt, sand, soil, or other loose material to and from the construction site should be tarped and maintain a minimum two feet of freeboard.		
h.	At a minimum, at each vehicle egress from the project site to a paved public road, install a pad consisting of washed gravel (minimum-size: one inch) maintained in a clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long (or as otherwise directed by SCAQMD).		
i.	Review and comply with any additional requirements of SCAQMD Rule 403.		

lesour	Timing	Responsible Party/Monitoring		
AQ-2		naust Emissions. The following should be adhered to during project grading and instruction to reduce VOC, NOx, and CO from construction equipment:	Construction	Construction Contractor
	a.	Heavy-duty diesel-powered construction equipment manufactured after 1996 (with federally mandated "clean" diesel engines) should be utilized wherever feasible as determined by the City Inspector.		
	b.	The engine size of construction equipment should be the minimum practical size.		
	c.	The number of construction equipment operating simultaneously should be minimized through efficient management practices to ensure that the smallest practical number is operating at any on time.		
	d.	Construction equipment should be maintained in tune per the manufacturer's specifications.		
	e.	Catalytic converters should be installed on gasoline-powered equipment, if feasible as determined by the City Inspector.		
	f.	Diesel particulate filters should be installed, if available.		
	g.	Diesel-powered equipment should be replaced by electric equipment whenever feasible.		

	Table 5. Resource Protection Measures				
Resour	Resource Topic / Resource Protection Measure Timing				
CR-I	Prior to finalizing the project design, a Phase II archaeological survey should be carried out to determine the boundaries for CA-LAN-229 and CA-LAN-44 within the project planning area. The survey should be performed by a qualified archaeologist that meets the U.S. Secretary of Interior's Standards and Guidelines for professional qualifications. (See http://www.nps.gov/history/local-law/arch_stnds_9.htm).	Design	NPS Project Manager NPS SMMNRA Cultural Anthropologist Qualified Archaeologist		
CR-2	The final design of the proposed stormwater drainage swale located in the field north of the Stable building should avoid any focused release of collected water to avoid down-flow erosional incising and exposure of archaeological artifacts that could then wash away. The final design of the swale would incorporate input from a qualified archaeologist and Native Americans to avoid potential impact to adjacent archaeological sites.	Design	NPS Project Manager Construction Contractor		
CR-3	 All ground disturbance should be monitored by a qualified archaeologist that meets the U.S. Secretary of Interior's Standards and Guidelines for professional qualifications (See http://www.nps.gov/history/local-law/arch_stnds_9.htm). Ground disturbing actions include the following. Visitor Center Services Area facilities construction Foundation excavation and seismic stabilization in and around the Stable building Print Shop demolition Entry road widening Parking lot and turnaround loop construction Stormwater runoff control and treatment construction Geo-thermal heating and cooling system construction 	Construction	NPS Project Manager Construction Contractor Qualified Archaeologist		

	Table 5. Resource Protection Measures				
Resour	ce Topic / Resource Protection Measure	Timing	Responsible Party/Monitoring		
	Interpretive programs amphitheatreLandscaping installation				
	A pre-construction meeting would be held with the NPS Cultural Anthropologist and the responsible parties to discuss the area's historic resources, clarify construction schedules, and establish a plan for archaeological monitoring of ground disturbing site work.				
CR-4	If archaeological resources are discovered during construction-related ground disturbance, work should be halted immediately in the vicinity of the find until National Park Service staff have been contacted and an appropriate mitigation strategy developed. Work may resume only after actions have been completed to address the findings. Any artifacts found would be curated by the National Park Service. If human remains, funerary objects, sacred objects, or objects of cultural patrimony are encountered, excavation and ground disturbing work on or adjacent to the project site (or area of discovery) should be stopped immediately in the vicinity. Provisions outlined in the Native American Graves Protection and Repatriation Act of 1990 (25 USC 3001) would be followed.	Construction	NPS Project Manager NPS SMMNRA Cultural Anthropologist Qualified Archaeologist		
CR-5	Archaeological sites present at King Gillette Ranch should be assessed every five years by a qualified archaeologist, and the conditions for the sites should then be updated the NPS Archaeological Site Management Information System.	Operation	NPS SMMNRA Cultural Anthropologist Qualified Archaeologist		
CR-6	The following actions would be taken to reduce unauthorized collecting of historic and	Construction	NPS Project Manager		

	Table 5. Resource Protection Measures				
Resour	ce Topic / Resource Protection Measure	Timing	Responsible Party/Monitoring		
	 Construction personnel would be educated about the need to protect any cultural 	Operation	NPS SMMNRA Cultural Anthropologist		
	resources encountered.		Qualified Archaeologist		
	• In advance of ground disturbing activities, instructions would be given regarding respectful treatment of human remains, and notification of the appropriate personnel in the event such remains are discovered.		NPS and MRCA staff		
	• Work crews would be instructed of the illegality of collecting artifacts on federal lands (Archaeological Resources Protection Act).				
	• Partner agencies' staff would continue to educate visitors about the cultural significance of Native American archaeological sites and the respect with which such sites should be treated, including why it is illegal to collect artifacts.				
Park O	perations				
PO-I	NPS base funding and FTE increases should be requested for maintenance and interpretive staff to cover added park operational needs at the new Visitor Center.	Operation	NPS SMMNRA Superintendent		
Public	Safety – Natural Hazards and Hazardous Materials				
PS-1	The Stable building would be retrofitted with seismic stability features that meet current	Design	NPS Project Manager		

	Table 5. Resource Protection Measures Resource Topic / Resource Protection Measure Timing Responsible Party/Monitoring				
Resou					
	federal, state, and local building codes for seismic safety.		Design/Architectural Contractor		
PS-2	 The final grading plan should prescribe grading strategies to protect structures from potential damage from liquifaction during earthquakes and soil settlement associated with expansive/compressible soils. The final design geotechnical report upon which the final grading plan would be based should incorporate the recommendations stated in the preliminary geotechnical evaluation prepared for the Visitor Center (N&M 2009), summarized as follows. Earthwork should be performed in general accordance with local and state agency grading ordinances and sound construction practices. A liquefaction analysis may be needed, and appropriate mitigation would be based on site-specific subsurface evaluation. On-site soils may need to be further evaluated to determine the extent of potential issues with expansive soils, soil settlement, and corrosive soils. Appropriate mitigation may involve removal of the problem soils and replacement with compacted fill, or deepening of building footings to extend to competent material. 	Design	NPS Project Manager Design/Architectural Contractor		
PS-3	The final design of the stormwater control system should reduce the potential for flooding of the Stable building. The final design should also protect the Stable building and new structures from soil settlement resulting from moisture infiltration into subsurface soils and/or expansive soil movement due to moisture fluctuation of the surficial/subsurface soil.	Design	NPS Project Manager Design/Architectural Contractor		

	Table 5. Resource Protection Measures				
Resource Topic / Resource Protection Measure			Responsible Party/Monitoring		
PS-4	Implementation of the proposed on-site, green technology, wastewater treatment system would take place only if the system complies with federal, state, and local building codes for health and sanitation systems.	Design	NPS Project Manager Design/Architectural Contractor		
PS-5	Upon excavation of the existing concrete foundation in the north wing of the Stable building, the construction contractor should observe the underlying soil for signs of petroleum product contamination, including soil appearance and odor. If signs of contamination are present, the construction contractor should immediately notify the NPS Project Manager. NPS would then develop and appropriate mitigation strategy for treating the contaminated soils.	Construction	NPS Project Manager Construction Contractor		
PS-6	All demolition and renovation work associated with removing asbestos-containing materials would be guided by an asbestos investigation and removal plan. This plan would be compliant with all federal, state, and local requirements and in accordance with Occupational Safety and Health standards pertaining to employee or worker exposure covered under 29 CFR 1910.1001. Additional work practices would comply with the Construction Standard for the Asbestos Industry (40 CFR 1926.1101 or CFR Title 8 Section 1529).	Construction	Construction Contractor		
PS-7	Where appropriate, activities conducted in interior rooms and spaces would be guided by a lead abatement investigation and removal plan. This plan would be compliant with all federal, state, and local requirements in accordance with Title 15, Chapter 53, subchapter IV Section 2688 – Control of Lead-based Paint Hazards at Federal Facilities and the Occupational Safety & Health Administration standard for construction (29 CFR 1926.62).	Construction	Construction Contractor		

	Table 5. Resource Protection Measures		
Resour	ce Topic / Resource Protection Measure	Timing	Responsible Party/Monitoring
PS-8	A wildfire evacuation plan should be developed and partner agency staff trained in its implementation prior to commencement of Visitor Center operation.	Operation	NPS Fire Management Officer and Safety Officer Partner Agency Staff
Utilitie	s and Public Services		
UTL-I	To address construction & demolition (C&D) solid waste impacts, a C&D Waste Recycling and Reuse Plan (RRP) should be prepared to ensure that C&D materials (e.g., asphalt, concrete, and green waste) are recycled and/or reused to the maximum extent feasible, in order to divert a minimum of 50% of the C&D debris from disposal at the local landfill.	Design	NPS Project Manager Construction Contractor
UTL-2	To address operational solid waste impacts, NPS should develop and implement a Trash & Recycling Program for the Visitor Center. The trash/recycling program should identify the location and type of each non-recyclable and recyclable container, the frequency and method of trash/recycling pick-up, and include signage to encourage park visitors to dispose of their trash properly.	Operation	NPS and MRCA management.
UTL-3	NPS should implement a green waste recycling program for the Visitor Center. The Green Waste Recycling Program should require that green waste be recycled as mulch, and applied on-site, whenever feasible.	Operation	NPS and MRCA management.

Table 5. Resource Protection Measures				
Resour	ce Topic / Resource Protection Measure	Timing	Responsible Party/Monitoring	
Vegeta	getation			
VEG-1	Construction fencing should be installed to delineate the 100-foot setback from the top of the Stokes Creek streambank or from the edge of the riparian canopy adjacent to the stream, whichever distance is greater. NPS staff should verify that the fencing has been correctly located.	Construction	NPS Project Manager Construction Contractor NPS Staff	
VEG-2	Staging areas and soil stockpiling locations should be located within the existing barren areas in the project planning area and that are outside the 100-foot setback from Stokes Creek.			
VEG-3	 To avoid injury or damage to native oaks and sycamores that could potentially be impacted by construction, construction fencing would be placed at least five feet outside the edge of the canopy of trees, or 15 feet from the trunk, whichever distance is greater. Equipment use, parking, and materials storage should be prohibited within the fenced areas. Construction fencing around trees would include, but not be limited to, the following areas. Sycamores surrounding the Stable building courtyard (northern and eastern sides of the trees) 	Construction	Construction Contractor NPS SMMNRA Plant Ecologist/Arborist	
	Oak trees north and west of the Print Shop			
	• Oak trees within or near the development footprint of the proposed parking lot and			

Table 5. Resource Protection Measures			
Resour	ce Topic / Resource Protection Measure	Timing	Responsible Party/Monitoring
	turnaround area		
	• Valley oaks on the east side of the entrance road		
	Prior to commencing construction, NPS staff should confirm that all trees have been adequately fenced.		
VEG-4	The two oak trees adjacent to the visitor orientation plaza within the Visitor Center Services Area and those that border the area on the western side should also be fenced, with the understanding that fencing would have to be removed during construction tasks that would encroachment into the protected root zone. Encroaching activities around any oak trees within the project planning areas should be performed using techniques and equipment that minimize removal of roots or crushing of the root system.	Construction	Construction Contractor NPS SMMNRA Plant Ecologist/Arborist MRCA Biologist
	• Trenching for utilities should require digging with hand tools, wrapping temporarily exposed roots, and threading of conduit through roots to the maximum extent feasible.		C C
	• Excavation for the concrete walkway slab around the restroom/storage building and future multi-purpose structure should be to the minimal depth needed for the sidewalk.		
	• Excavation for constructing the visitor orientation plaza and fountain should be minimized, and performed with hand tools, with minimal cutting of the root system. Base material for the plaza should be clean and non-toxic, and should be backfilled in around roots and minimally compacted as balanced with making sure the plaza surface would remain stable, with minimal settling.		

Table 5. Resource Protection Measures			
Resource Topic / Resource Protection Measure		Timing	Responsible Party/Monitoring
VEG-5	To mitigate the encroachment into four oak trees, a minimum of two trees for each tree that has an encroachment, per requirements of the Los Angeles County Oak Tree Protection Ordinance. Eight replacement oak trees should be planted for the four encroached-upon trees. The trees should be planted within the two defined restoration areas on the northern side of Stokes Creek. If possible, oak tree stock should be grown from acorns from trees within the King Gillette Ranch area or adjacent Malibu Creek State Park. The health of the trees should be monitored for at least five years, with replacement trees planted for any trees that do not survive within the five-year timeframe.	Operation	NPS SMMNRA Restoration Ecologist MRCA Biologist
VEG -6	The stormwater catchment facility on the east side of the eucalyptus allée should be constructed at least 26 feet from the nearby eucalyptus tree(s) to avoid impact to the tree root systems.	Construction	NPS Project Manager Construction Contractor
VEG-7	The area around the proposed stormwater catchment swale in the field north of the Stable building should be monitored for post-disturbance germination of noxious non-native plant species. Monitoring and, if necessary, weed eradication efforts should take place for three years after construction.	Operation	NPS SMMNRA Plant Ecologist
	Monitoring for post-construction presence of new non-native weed species in all areas where ground has been disturbed should occur for three years, and eradication efforts made in the case of finding new weed occurrences.		

	Table 5. Resource Protection Measures		
Resour	ce Topic / Resource Protection Measure	Timing	Responsible Party/Monitoring
VEG-8 Water	Two barren areas adjacent to Stokes Creek, comprising approximately two acres, should be restored as riparian habitat to widen the vegetated corridor along Stokes Creek in the project planning area north of the southern boundary (Figure 13). The restoration would mitigate construction-related impacts to native trees and project operational impacts to wildlife from light and noise. The restoration would also incorporate a footpath for use in interpretive and educational programs offered at the Ranch. NPS would prescribe a plant palette consistent with natural, undisturbed habitat along Stokes Creek in Malibu Creek State Park and determine restoration performance standards for assuring restoration success.	Operation	NPS Restoration Ecologist NPS and MRCA Staff
WR-I	A Stormwater Pollution Protection Plan (SWPPP) that meets U.S. Environmental Protection Agency requirements for reducing impacts to water quality should be prepared, and implementing water quality-protective Best Management Practices (BMPs) for construction sites. Any pertinent Best Management Practices (BMPs) consistent with Los Angeles County's Standard Urban Storm Water Mitigation Plan (SUSMP) would be incorporated into the SWPPP.	Construction	NPS Project Manager Construction Contractor
WR-2	Erosion control devices, including temporary siltation basins, should be installed around all construction areas to insure that sedimentation is trapped and properly removed. Stored topsoil would be surrounded by silt fencing and overtopped by semi-permeable matting anchored together to prevent siltation from heavy runoff during rainstorms. Erosion control devices should be inspected periodically throughout the construction project and during rain storms.	Construction	Construction Contractor

	Table 5. Resource Protection Measures		
Resourc	e Topic / Resource Protection Measure	Timing	Responsible Party/Monitoring
WR-3	Installation of native and other landscaping should take place as soon as work in each area has been completed, i.e. around the Visitor Center Services Area, the parking lot, and around the new picnicking area that would replace the Print Shop. All plantings should be in place within one year after completion of construction in that area. Any fertilizer, herbicides, or pesticides used on the landscaping would be subject to approval through the NPS Integrated Pest Management System prior to application.	Construction	Construction Landscape Contractor NPS Staff
WR-4	All debris, litter, leaks or spills should be removed promptly and in an approved manner.	Construction	Construction Contractor
WR-5	To prevent pesticides and herbicides from mixing with stormwater or presenting hazardous exposures, the agencies should establish a landscape maintenance and management plan that includes approval through the NPS Integrated Pest Management System.	Operation	NPS and MRCA Staff
WR-6	Stormwater collection systems should be routinely inspected in conformance with any regulatory agency permit conditions to ensure that filtering technologies are properly functioning and to ensure that no erosion is occurring at the outfall point in the system.	Operation	NPS and MRCA Staff
Wildlife			
WLD-1	During construction, trash cans and recycling bins should be made available for construction workers. All food and containers should be removed from the site and properly disposed of	Construction	NPS Project Manager

	Table 5. Resource Protection Measures		
Resourc	ce Topic / Resource Protection Measure	Timing	Responsible Party/Monitoring
	daily. During the construction close-out final walk-through to confirm that all trash bins have been removed.		Construction Contractor
WLD-2	Trash cans and recycling bins would be conveniently placed to encourage prompt disposal of wastes and to discourage littering. Trash cans and recycling bins should be frequently emptied. Signs should be installed directing visitors to not feed animals.	Operation	NPS and MRCA Staff
WLD-3	Light and noise should be controlled to avoid disturbance to wildlife using the riparian habitat and the individual oak trees throughout the site. See conditions under Aesthetics for lighting and noise mitigation measures.	Operation	NPS and MRCA Staff
WLD-4	To assure compliance with the Migratory Bird Treaty Act (MBTA), areas either directly or indirectly affected by construction activities should be surveyed for nesting birds. The surveys should be conducted in accordance with California Department of Fish and Game regulations designed to uphold the MBTA, prescribed as follows (CDFG, South Coast Region 5, 2007). "Proposed project activities (including disturbances to native and non-native vegetation and man-made nesting substrates) should take place outside of the breeding bird season which generally runs from March I- August 3I (as early as February I for raptors) to avoid take (including disturbances which would cause abandonment of active nests containing eggs and/or young). Take means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture of kill (Fish and Game Code Section 86).	Construction	NPS Staff Construction Contractor Qualified Bird Specialist
	"If project activities cannot feasibly avoid the breeding bird season, the Department		

rce Topic / Resource Protection Measure	Timing	Responsible Party/Monitorin
recommends that beginning thirty days prior to the disturbance of suitable nesting habitat the project proponent should arrange for weekly bird surveys to detect any protected native birds		
in the habitat to be removed and any other such habitat within 200 feet of the construction		
, work area (within 500 feet for raptors) as access to adjacent areas allows. The surveys should		
be conducted by a qualified biologist with experience in conducting breeding bird surveys. The		
surveys should continue on a weekly basis with the last survey being conducted no more than 3		
days prior to the initiation of clearance/construction work. If a protected native bird is found,		
the project proponent should delay all clearance/construction disturbance activities in suitable		
nesting habitat or within 200 feet of nesting habitat (within 500 feet for raptor nesting habitat)		
until August 31 or continue the surveys in order to locate any nests. If an active nest is located,		
clearing and construction within 200 feet of the nest (within 500 feet for raptor nests) shall be postponed until the nest is vacated and juveniles have fledged and when there is no evidence of		
a second attempt at nesting. Limits of construction to avoid a nest should be established in the		
field with flagging and stakes or construction fencing. Construction personnel should be		
instructed on the sensitivity of the area. The project proponent should record the results of		
the recommended protective measures described above to document compliance with		
applicable State and Federal laws pertaining to the protection of native birds."		
NPS staff should identify the appropriate person to perform bird surveys. Areas to be surveyed		
would include the oaks and sycamores surrounding the Stable building and Print Shop, the		
eucalyptus allée, the open fields to the north and east of the Stable and Print Shop, and along Stokes Creek.		

3.1.3 National Park Service Prohibition of Impairment of Park Resources And Values

Impairment is an impact that, "in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values" (NPS *Management Policies*, 2006, Sec. 1.4.5). Whether an impact meets this definition depends on the particular resources that would be affected, the severity, duration, and timing of the impact, the direct and indirect effects of the impact, and the cumulative effects of the impact in question with other impacts." Any park resource can be impaired, but an impact would be more likely to result in impairment if it affects a resource or value whose conservation is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- Key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- Identified as a goal in the park's general management plan or other relevant National Park Service planning documents.

An impact would be less likely to result in impairment if it is an unavoidable result, which cannot reasonably be mitigated, of an action necessary to preserve or restore the integrity of vital park resources or values.

Neither Alternative A (the No Action Alternative) nor Alternative B (the Preferred Alternative) would produce major adverse impacts or impairment of park resources or values.

3.2 Impact Analysis

3.2.1 ACCESSIBILITY FOR INDIVIDUALS WITH DISABILITIES

REGULATIONS AND POLICIES

It is National Park Service policy to ensure that all people, including those with disabilities, have the highest reasonable level of accessibility to National Park Service programs, facilities and services. Other mandates include the requirement to provide reasonable accommodation of known disabilities of qualified applicants and employees (Director's Order 16A, Reasonable Accommodation for Applicants and Employees with Disabilities) and to ensure that facilities are readily accessible to and usable by individuals with disabilities, including individuals who use wheelchairs (Director's Order 42, Accessibility for Visitors with Disabilities in National Park 65 Service Programs and Services). *Management Policies 2006* (NPS 2006) also emphasizes the need to comply with the Americans with Disabilities Act.

AFFECTED ENVIRONMENT

Public parkland structural facilities throughout SMMNRA have generally been designed or retrofitted to accommodate persons with disabilities, including the current primary visitor center in Thousand Oaks. However, the current visitor center, while in a pleasant suburban setting, does not offer nearby picnic tables or accessible trails within a parkland setting. Some trailheads have amenities, such as restrooms, drinking fountains, and picnic tables, that are designed for wheelchair access. There are short, fully accessible trails at approximately ten trailheads throughout SMMNRA. Physically challenged visitors at one state-managed beach can request a "beach chair" during their visit to reach the shoreline. In spite of several existing opportunities, there is room to improve accessibility in many locations, ranging from installing more accessible picnic tables at more trailheads, providing accessible pathways to the tables, removing stepovers or other barriers to wheelchairs, to improving accessibility to drinking fountains and restrooms.

King Gillette Ranch has accessibility designed into existing structures throughout the Ranch. There are also paved roads that could accommodate wheelchair use, although the moderate steepness of the terrain may preclude most persons in wheelchairs. Existing recreational trails are not accessible owing to steep trail grade. The Visitor Center project planning area is currently not designed for access, although the area is generally flat. Persons with disabilities can park at the informal parking lot for the nearby White House (not a part of the planning area) and travel a limited distance from the parking area before reaching inaccessible areas owing to soft surfaces and rough terrain. Overall, the site has not been planned for public accessibility as yet.

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Current conditions of poor accessibility would not change under Alternative A. Parking in the informal paved lot for the White House would be available, but no good travel routes except to the White House would exist, with no opportunity to comfortably enjoy the beautiful setting. The current restrooms in the planning area are chemical toilets with limited accessibility. The Stable building is current off-limits to all visiting public, including persons with disabilities. The current accessibility setting in the project planning area presents adverse, moderate, long-term, local impacts to persons with disabilities seeking to enjoy the parkland setting.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on accessibility for individuals with disabilities, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. In particular, other park management plans are applicable to accessibility cumulative impacts. As noted in the Affected Environment description, SMMNRA has several recreation-related opportunities for persons with disabilities, including structures and some recreational facilities at local municipal parks. Most recreational trails within SMMNRA are not accessible owing to the mountainous terrain. Most of the

satellite visitor contact stations that provide visitor orientation are not accessible, therefore limiting those with disabilities to receiving park orientation and participating in interpretive programs in nonpark structures and removed from the SMMNRA park setting. Overall, the proportion of outdoor recreational opportunities for those with disabilities is small compared to opportunities for those without disabilities. The proposed King Gillette Ranch DCP and the forthcoming SMMNRA Trail Management Plan would identify opportunities to provide additional recreational facilities that would be accessible to all individuals, including those with disabilities. Past, present, and the foreseeable park management plans would have a beneficial, moderate, long-term, regional (SMMNRA-wide) impact on accessibility for individuals with disabilities. When considered with these other projects, Alternative A would have a cumulative beneficial, moderate, long-term, regional (SMMNRA-wide) impact on accessibility.

CONCLUSIONS

Alternative A would perpetuate lost opportunity for providing accessible visitor center amenities by not taking advantage of the project planning area's generally flat terrain and attractive parkland setting. Alternative A would have adverse, moderate, long-term, local impacts to persons with disabilities owing to limited accessibility to visitor center amenities within attractive natural areas designed for accessible outdoor recreation. Alternative A would contribute to the cumulative impact scenario that presents adverse, moderate, long-term, and regional impacts to persons with disabilities.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

Alternative B would realize the development of a fully accessible, full-service Visitor Center in a parkland setting that would provide fully accessible outdoor recreation amenities. The parking lot would have handicapped-marked parking stalls. Accessible pathways would be constructed between parking, the Visitor Center Services Area, the Visitor Center, the proposed amphitheatre, and the picnicking area under the shade of oaks where the Print Shop currently is located. Alternative B would present beneficial, moderate, long-term, and regional impacts by creating a new center of accessibility in terms of both Visitor Center amenities and adjacent outdoor recreational resources.

CUMULATIVE IMPACTS

The cumulative impact setting for Alternative B is the same as for Alternative A: recreational opportunities for persons with disabilities are limited, in particular visitor center amenities that are also located in natural settings. Alternative B, however, would contribute positively to the cumulative setting owing to the development of a unique resource—a fully accessible, full-service visitor center in a national recreation area next to metropolitan Los Angeles. Under Alternative B, the cumulative impacts would be beneficial, moderate, long-term, and regional, with the proposed project tipping the balance from adverse to beneficial impacts.

CONCLUSIONS

Alternative B would present beneficial, moderate, long-term, and regional impacts by creating a new center of accessibility in terms of both visitor center amenities and adjacent outdoor recreational resources within SMMNRA. This Preferred Alternative would also contribute positively to recreational opportunities for persons with disabilities in the cumulative impact scenario, resulting in beneficial, moderate, long-term, and regional impacts.

3.2.2 AESTHETICS

REGULATIONS AND POLICIES

Regulations and policy relevant to aesthetics and visual resource management at King Gillette Ranch include the National Environmental Policy Act, National Historic Preservation Act, *Management Policies* 2006, Coastal Zone Management Act, California Coastal Act, Los Angeles County *General Plan*, and the Los Angeles County *Malibu Land Use Plan*.

AFFECTED ENVIRONMENT

Santa Monica Mountains National Recreation Area features spectacular views of chaparral-blanketed mountains, oak-studded valleys, rocky outcroppings, and on the south side of the mountains, nearly constant views of the Pacific Ocean. King Gillette Ranch is located in the center of the Santa Monica Mountains National Recreation Area, within the highly scenic Las Virgenes Valley. Las Virgenes Valley is the only wide valley in the Santa Monica Mountains that has not been developed into a suburban-level community and is primarily in public ownership. The project vicinity is generally characterized by parkland and low density rural residential development, with relatively dark night skies and a quiet soundscape owing to distance and topographic (ridgeline) separation from suburban and urban development in Calabasas and the greater Los Angeles metropolitan area. Ridgelines on the north side of Mulholland Highway are designated as significant ridgelines in Los Angeles County's Community Standards District for the Santa Monica Mountains North Area Plan (LACDRP, 2000). The ridgeline traversing the southern portion of the property contains large stands of native habitat that present an unobstructed ridgeline view along the southern horizon as seen from the project planning area. The Malibu Land Use Plan Visual Resources Map (LADRP, 1986) identifies these hills as the Claretville Hills, a scenic resource element deserving protection.

The majority of the 588-acre Ranch consists of natural, undeveloped land. Approximately 59 acres of largely developed and landscaped area (the cultural core) cover the flatter or gently sloping portions of the property adjacent to Las Virgenes Road and Mulholland Highway. The developed core of the property consists of a variety of buildings ranging in height and size, interspersed between circulation elements and ornamental and natural landscape. The 18-acre project planning area for this environment assessment is located in the northwest corner of the property within the cultural core at the lower elevations within the Ranch. While the property features a wide range of site improvements, these improvements are set against a stunning backdrop of surrounding open space, hills, and ridgelines. The Ranch, itself, with the Spanish Revival architectural theme employed by the renowned architect Wallace Neff, allows viewers to recall the magnificent residential estate of the razor magnate.

The Ranch is visible from and bound, in part, by Las Virgenes Road and Mulholland Highway. Large nonnative grassland fields adjacent to Las Virgenes Road and Mulholland Highway are routinely mowed and allow mostly clear views toward King Gillette Ranch and the project planning area. Las Virgenes Road and Mulholland Highway are designated scenic highways by Los Angeles County and the State of California for the segments adjacent to King Gillette Ranch. In addition to being visible from these scenic highways, the site is visible from a number of public recreation trails.



Figure 9. King Gillette Ranch Landscape Overview

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

The Ranch would continue to operate as a public park with the existing level of activities. The visual character of the site would not change from its existing condition. The dominant natural features of the area (varied topography and native vegetation) would continue to be visually prominent. The agencies would conduct ongoing public programs and facility maintenance. Permitted special events and filming would continue, including within the project planning area. Permitted special events and filming occasionally occur at night and require artificial lighting that lights up the dark skies at the Ranch. Impacts from this nighttime lighting would be temporary, or short-term, in nature, although depending on lighting intensity, impacts could range from negligible to minor. The Ranch area would continue to be characterized as highly scenic, with grassy fields, oak woodlands, and a localized development of

structures. The pastoral setting of the area would continue to feature park maintenance and limited office operations, public programs including outdoor recreation, and ranger activities.

The original Gillette-Brown era buildings would be maintained per current routine and cyclic maintenance requirements, and would continue to contribute to the aesthetic enjoyment of the architectural ambience provided by these buildings. Under Alternative A, however, no action would be taken to control the occasional rain storm sheet flow that surrounds the Stable building, causing the vacant structure to continue falling into disrepair, with the potential for complete loss of this visually pleasing structure over time.

Continued current levels of day use, park maintenance of grounds and buildings, and permitted special events would have adverse, negligible to minor, short-term and long-term, local impacts on aesthetics due to visual degradation of the Stable building, and night lighting and noise intrusions.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on aesthetics, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable future suburban and rural estate development projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. Past development has impacted the park aesthetics of the area by replacing natural landscapes with suburban development. Construction activities associated with the proposed reasonably foreseeable actions would introduce visual, lighting, and noise intrusions into the area because of construction traffic, fencing, staging areas, and landform grading; and long-term residential effects of permanently developed landscapes, nighttime lighting, and noise from residential activities. The resulting neighborhoods and rural estates, in combination with Alternative A, would have adverse, moderate, long-term, and regional (SMMNRA-wide) impacts on aesthetics, including scenic resources, dark night skies, and the quiet soundscape.

CONCLUSIONS

The partner agencies would continue ongoing public programs, facility maintenance, and permitted special events at King Gillette Ranch with no new development. Under Alternative A, there would be a continuing adverse negligible to minor, short-term and long-term, local impact on aesthetics because of visual, lighting, and sound intrusions associated with current property uses. In combination with surrounding existing and proposed development, Alternative A would result in an adverse, moderate, long-term, and regional (SMMNRA-wide) impact. However, the impacts would not result in impairment of park aesthetic resources, including scenic, night sky, and soundscape resources.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

Construction-related Effects on Aesthetics. Grading and construction activities within the Visitor Center project planning area would include demolition of the Print Shop, grading and construction for the restroom/storage and future multipurpose structures (single-story buildings with a total of 2,000 sq. ft.), a new parking area, the new outdoor amphitheatre, interior/exterior aesthetic improvements to the

Stable building, and installation of new landscaping, would have detectable effects on scenic resources within the project planning area.

Construction, grading, demolition, and building modification activities would occur in existing developed areas on the property that are minimally visible from Las Virgenes Road and Mulholland Highway, but would be highly visible from areas and trails within King Gillette Ranch. The presence of construction workers and construction-related equipment activity would temporarily detract from the visual character of the project area and create noise from heavy equipment operation. Resource protection measures are prescribed in Table 5 to reduce the temporary visual and noise impacts during construction.

Alternative B would entail widening the existing entry gate to accommodate two-way traffic. The existing gate would have to be replaced, the entrance widened, and the associated wall modified. The new two-lane driveway would be located within the existing eucalyptus allée. No eucalyptus trees would be removed for road widening. The entry experience remains the same as the original primary entrance into the Ranch. Entrance gate replacement and entrance would be designed to integrate with existing architectural details (Table 5, Resource Protection Measures). The proposed actions to the entry system (gate, walls, entrance road) would have neither adverse nor beneficial impacts on visual aesthetics.

Under Alternative B, construction modifications to the Stable building would improve the aesthetics of this structure. The Stable building is one of the original Gillette estate structures and adds to the enjoyable architectural ambiance at King Gillette Ranch. The Stable building is currently vacant and falling into an increasing state of disrepair. Modifications to the structure are designed to reverse the decay and would reflect the aesthetically pleasing Spanish Revival architectural character by using compatible roofing and stucco siding. The proposed new structures in the Visitor Center Services Area would incorporate design features reflective of the Spanish Revival architecture, including red tile roofs and white stucco finish, thus creating a compatible visual presentation of the Visitor Center and services area as viewed by arriving visitors. Additionally, the proposed demolition of the Print Shop would remove this architecturally incompatible structure from the visual setting. The proposed actions for Stable building and Visitor Center Service Area would result in beneficial, minor, long-term, and local impacts to this structure in terms of its visual aesthetics.

Overall, construction activities would have either no impacts; or adverse and beneficial, minor, short-term and long-term, and local impacts on aesthetics.

Operation-related Effects on Aesthetics. The preferred alternative would result in new structures, a new parking area and widened entrance road, and a renovated Stable building modified for use as a Visitor Center. The design of the new structures is planned for compatibility with the Spanish Revival architectural theme of the original Gillette Residence that adds the visual charm to the developed portion of the Ranch. Landscaping around the proposed Visitor Center Services Area would be an aesthetic and visual improvement over the current barren landscape adjacent to the vacant Stable building as viewed from within the Ranch or from the adjacent scenic highways or public recreational trails. Native plants would comprise the majority of the landscaping, and thus would provide visual

continuity with the surrounding native habitat. The proposed new and modified facilities and landscaping would have a beneficial, minor, long-term, local impact on visual resources.

Under Alternative B, the Visitor Center and its services area would introduce new sources of artificial nighttime lighting at the Ranch. Resource protection measures in Table 5 have been assigned to reduce the effects of light from the project planning area on dark skies, such as using downward-facing, shielded, low-wattage lighting fixtures, and closing blinds and draperies inside buildings at night. Permitted special events would have the potential to use artificial nighttime lighting within the project planning area. As prescribed in Table I, permitted special events would have to be compatible with the visitor experience and natural resource protection.

The natural soundscape can be defined as "usually composed of both natural ambient sounds and a variety of human-made sounds" (NPS 2000). Noise, an element that can degrade the natural soundscape, is defined as "...unwanted or undesired sound, often unpleasant in quality, intensity or repetition... In a national park setting, noise is a subset of human-made noises" (NPS 2002). Noise may vary in character from day to night and from season to season. In the national recreation area, noise is difficult to avoid owing to traffic, airplanes, and the general dull roar associated with the Los Angeles metropolitan area. However, noise levels drop off rapidly upon entering the minimally developed areas of SMMNRA, including Las Virgenes Valley where King Gillette Ranch is located. Sound can be perceived as noise because of loudness, frequency, duration, occurrence at unwanted times, or because it interrupts or interferes with a desired activity. Noise can adversely affect park resources or values, including, but not limited to, natural soundscapes, wildlife, and visitor experience. In the rural estate community in which King Gillette Ranch is located, sound can also impact the quality of life for park neighbors. The nearest private residence is approximately 1,000 feet from the Visitor Center.

Alternative B would generate minimal amounts of noise, mostly of a low-level nature associated with visitors arriving and departing from the Visitor Center and taking part in outdoor programs. Permitted special events may generate noise. However, as prescribed in Table I, Alternatives Comparison, permitted special events would have to be compatible with the visitor experience and natural resource protection.

For both night lighting and noise impact mitigation, resource protection measures have been prescribed in Table 5 to reduce impacts from light and noise, such as limitations on time, duration, and levels of lighting and amplified sound systems. With the proposed resource protection measures and the requirement that permitted special events be compatible with visitor experience and natural resource protection, Alternative B would have adverse, minor, short-term and long-term, local impacts on the lighting and noise aspects of Visitor Center operation.

CUMULATIVE IMPACTS

The scenic resources impact analysis for past, present, and reasonably foreseeable actions under Alternative B is the same as described under Alternative A. See the discussion of cumulative effects under Alternative A. Alternative B, combined with the past, present, and reasonably foreseeable actions would have an adverse, minor, long-term, regional impact on aesthetics.

CONCLUSIONS

Alternative B would have both adverse and beneficial, minor, short-term and long-term, local impacts on aesthetics and visual resources scenic resources associated with construction and operation of the proposed Visitor Center. Adverse impacts would be associated with temporary construction visual obstructions and nighttime lighting and noise. Beneficial impacts would accrue from restoration of the vacant Stable building and construction of visually compatible new buildings in the Visitor Center Services Area, and new landscaping with native plants to replace the current barren areas. There would be no impairment of park aesthetics with implementation of Alternative B.

3.2.3 AIR QUALITY

REGULATIONS AND POLICIES

The regulations and policies associated with the retention of air quality for evaluation as an impact topic are found in the federal Clean Air Act, the Clean Air Act Amendments of 1990, California Air Resources Board, and *Management Policies 2006* (NPS 2006).

AFFECTED ENVIRONMENT

SMMNRA falls within the jurisdictions of two separate air quality control agencies. The portion of the national recreation area within Ventura County is under the authority of the Ventura County Air Pollution Control District, whose district overlaps the entire county. The portion of SMMNRA located in Los Angeles County is within the South Coast Air Quality Management District (SCAQMD). SCAQMD manages air quality for the South Coast Air Basin (SCAB), which includes the coastal two-thirds of Los Angeles County, all of Orange County, and the western, urbanized, and coast-proximal portions of Riverside and San Bernardino counties. Much of inland Riverside County is included as well. SCAB includes the nation's second largest greater metropolitan area and California's largest urban region.

The climate of the coastal, southwestern portion Los Angeles County, where the project is located, is identified as an interior valley sub-climate of Southern California's Mediterranean-type climate. It is characterized by warm summers, mild winters, infrequent rainfall, moderate afternoon breezes, and generally fair weather. The clouds and fog that form along the coastline only infrequently extend as far inland – and through the mountains – as the project planning area. If they do, they often burn off quickly after sunrise. The airflow across the project planning area is most often from the ocean or from lightly populated areas of the basin. Air quality in the project vicinity is often better than in those parts of the airshed that have more heavily developed areas in their upwind path. Seasonal Santa Ana winds during the fall bring about strong north/northeast winds originating from inland deserts, overtaking the typical gentle, diurnal, solar-driven onshore/offshore winds.

The U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) set air quality standards by measuring levels or certain "criteria pollutants." The SCAB is in non-attainment for ozone (O₃), carbon monoxide (CO), PM_{10} (particulate matter with a diameter ≤ 10 microns), and $PM_{2.5}$ (particular matter with a diameter ≤ 2.5 microns), meaning that levels of these pollutants are higher than standards allow. As a result, federal and state law require the preparation and implementation of plans

to reduce pollution to acceptable levels. The SCAQMD has responded to this requirement by preparing a series of Air Quality Management Plans (AQMPs). The SCAQMD recently released an updated AQMP in June 2007. The last official AQMPs were the 2003 AQMP and 1997 AQMP, which was amended by the 1999 revisions to the Ozone State Implementation Plan (SIP).

Surrounded by developed areas, regional emissions are the major source of air pollution in the park. Looking outward, park activities contribute only insignificantly to SCAB non-attainment, which occurs primarily from significant regional industrial and transportation activities. Park contributions result from emissions related to combustion for heating, park motor vehicle emissions, and fugitive dust occurring from regular maintenance and construction activities. Visitation to the park contributes further motor vehicle emissions, but these contributions are negligible. The national recreation area is traversed by three state highways (CA-1, CA-23 and CA-27), one interstate highway (405 Freeway), and a U.S. highway (101 Freeway). Kanan Road and Malibu Canyon Road, county-designated thoroughfares, are additional significant regional routes. Trips generated by the park are insignificant against background levels of regional traffic.

Sensitive air quality receptors include residential areas, day care centers, schools, hospitals, nursing homes, and recreation areas. There are no day care centers, hospitals, or nursing homes in the project vicinity. Park visitors recreate in SMMNRA, including King Gillette Ranch. Large lot residences are adjacent to the Ranch area, and A.E. Wright Middle School is located approximately two miles north of the Ranch area and the Independent Viewpoint School is located approximately five miles northeast of the Ranch.

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Because there would be no new traffic patterns, construction, use of heavy equipment, or disturbance associated with current management, there would be no changes to the existing effects of activities on air quality in the project area. Park vehicle traffic and other pollution sources would continue to produce adverse, negligible, short-term, local and regional, impacts on air quality.

CUMULATIVE IMPACTS

To evaluate cumulative air quality, the impacts of the project were considered in conjunction with the impacts of past, current, and foreseeable future suburban and rural estate development projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. Construction of nearby projects would contribute to fugitive dust from grading activities and particulate matter from diesel emissions occurring from construction equipment. Incomplete combustion from vehicles would contribute to carbon monoxide levels. The forthcoming SMMNRA Trail Management Plan would be consistent with the desired resource conditions and visitor experiences of the appropriate management zones identified in the parks' *General Management Plan*. Any new trail development would likely result in negligible adverse effects on air quality from construction activities. The Diamond X Ranch Intern Dormitory, currently under construction, contributes negligible fugitive dust and construction emissions.

Overall, the past, present, and reasonably foreseeable future actions in combination with Alternative A would have an adverse, negligible, short- and long-term, regional impact on air quality. Alternative A would contribute negligibly to the overall adverse cumulative impact.

CONCLUSIONS

Alternative A would result in continued, adverse, negligible, long-term, local adverse impacts to air quality. In the cumulative impact scenario, Alternative A would collectively result in an adverse, negligible, short- and long-term, regional impact on air quality. There would be no impairment of SMMNRA resources or values.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

Construction-related Effects. Construction of the Visitor Center and demolition of the Print Shop would result in the following adverse effects on air quality:

• Fugitive dust and particulate matter would result from construction activities and equipment. Due to the large size of the King Gillette Ranch site, there is limited potential for dust to impact to offsite areas.

However, the project also realizes beneficial air quality impacts:

- Modification of the existing Stable building instead of construction of a new facility; and new, green construction result in smaller emissions and grading footprint.
- Green construction utilizes low VOC (volatile organic compounds) and non-toxic materials, minimizing off-gassing.
- Using more local, or regionally closer, sources for building materials, resulting in smaller emissions.

Operation-related Effects. Operation of the Visitor Center results in the following adverse and beneficial air quality impacts:

- Increased trip generation is expected with the new, state-of-the-art and centrally located Visitor Center, resulting in more vehicle emissions.
- Park maintenance duties and operational footprint would increase, as the new facilities would be owned and maintained by NPS. The current visitor center is housed in a building operated by the City of Thousand Oaks. However, regional maintenance, and its impacts to air quality, from the perspective of the SMMNRA region would not be cumulatively increased.
- Solar hot water heating (with electrical backup) and solar-powered (via electricity) ground-loop geothermal heating would result in no net emissions at the project site, and a net reduction across SMMNRA when compared to current visitor center hot water and HVAC heating production emissions.

• On-site production of all needed electricity reduces consumption of electricity generated offsite from fossil-fuel combustion.

Alternative B would have adverse, minor, short-term, and local construction-related impacts, and beneficial, minor, long-term, and regional operation-related impacts.

CUMULATIVE IMPACTS

The air quality impact analysis for past, present, and reasonably foreseeable actions under Alternative B is the same as described under Alternative A. See the discussion of cumulative effects under Alternative A. Alternative B and the Diamond X Student Intern Center would contribute less to adverse air quality impacts than traditional non-green construction. Alternative B would contribute to cumulative adverse, negligible, short-term, local impacts to air quality during construction, but would make a beneficial, negligible impact contribution to the cumulative adverse, negligible, long-term, regional impact to air quality.

CONCLUSIONS

Alternative B would have an adverse, negligible, short-term, local impact on air quality due to the effects from construction, and a beneficial, negligible long-term, local impact on air quality. Though operation of the Visitor Center provides both beneficial and adverse impacts to air quality, all net effects are anticipated to be negligible compared against the cumulative background regional air quality context. There would be no impairment of SMMNRA resources or values.

3.2.4 ARCHAEOLOGICAL AND ETHNOGRAPHIC RESOURCES

REGULATIONS AND POLICIES

Regulations and policy relevant to archaeological and ethnographic resources include the National Historic Preservation Act, 36 CFR 800, 36 CFR 60, American Antiquities Act, Historic Sites Act, Archaeological Resources Protection Act, Archaeological and Historic Preservation Act, National Environmental Policy Act, Executive Order 11593, Executive Order 13007, Native American Graves Protection and Repatriation Act, Presidential Memorandum on Government-to-Government Relations, Departmental Manual 411DM, Museum Handbook, Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, Director's Order 28: Cultural Resource Management, NPS-28 *Cultural Resource Management Guideline* (NPS 1998), Director's Order 24: Museum Collections Management, and *Management Policies* 2006 (NPS 2006).

AFFECTED ENVIRONMENT

The SMMNRA GMP (NPS 2002) notes that "the Santa Monica Mountains have been at the center of complex human interactions that shaped the environment and affected cultural processes in wider contexts." There are numerous cultural resources of interest throughout the national recreation area, including over 1,000 recorded archaeological sites, a rich American filming history, and several structures and landscapes listed on the National Register of Historic Places.

Important cultural resources, or "historic properties" under the National Historic Preservation Act, are those that are listed or eligible for listing on the National Register of Historic Places (NRHP). To be eligible for listing, a cultural resource must possess integrity of location, design, setting, material, workmanship, feeling, and association and meet one or more of the following criteria:

- A. Is associated with events that have made a significant contribution to the broad patterns of our history.
- B. Is associated with the lives of persons important in the past.
- C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

The following section discusses background for each type of cultural resource that could be impacted by this project (archeological sites and ethnographic resources) and assesses the impact of the project on these resources.

ARCHAEOLOGICAL RESOURCES

The proposed project planning area is located within an area known to be archaeologically sensitive. Previous reports concerning archaeological resources on the proposed project planning area include the following:

- King, Chester D., 1982. Archeological Investigations at Talepop (LAN-229) Volume I,II,& III. Confidential report filed at Santa Monica Mountains National Recreation Area.
- Singer & Associates, Inc, 1991. Cultural Resources Survey and Impact Assessment for the Soka University Campus. July 20, 1991.
- King, Chester D., Singer, C.A., 1992. Proposal for a Phase II Archaeological Program at Soka University. February 3, 1992.
- King, Chester D., Singer, C.A., 1992. Analysis of Projected Impacts from the Proposed Soka University Expansion Project and Alternatives. October 13, 1992.
- King, Chester D., 2006. Archaeological Assessment of King Gillette Ranch, Los Angeles County, California.

According to the previous reports, the proposed project planning area is located within the region historically occupied by the Malibu Chumash. Archaeological evidence indicates that the Chumash settled the coastal region of California more than 9000 years BP. They followed a subsistence pattern which centered on land mammal hunting and hard seed gathering. Although hunter bands and travelers may have passed through the Las Virgenes Canyon area as early as that, the earliest inhabited sites in the area date to 7,000 years ago. Over time, they "settled in" and learned to use local resources such as shell fish, ocean fish, acorns and islay.

Past archaeological investigations of the proposed project planning area have identified three prehistoric archaeological sites within the Stokes Canyon Creek area. The sites are described generally below:

CA-LAN-229 was recorded in 1960 as a shell midden. Since that time, the site has been studied extensively during several excavations and surveys. It has subsequently been associated with the ethnohistoric village of *Talepop* which lies partially within the boundaries of the Ranch. *Talepop* appears to have possessed considerable significance within the inland Malibu Chumash culture. It was linked by a direct transportation route with the important coastal center of *Humaliwu*, site of the regional chief. *Talepop* also possessed local significance during the historic period of the Spanish occupation and missionization. It was a major source of recruitment for the nearby Mission San Fernando, and its inhabitants also provided essential labor for local ranchos.

Analyses of material found in this site indicated that the site was occupied from 1100 to 1830 A.D. Excavations on the west side of Las Virgenes Road suggest that the extent of CA-LAN-229 east of the roadway are "expected to be buried under one to several feet of soil deposited during historic floods of Stokes Creek (King 2006). Construction of Las Virgenes Road and Mulholland Highway have disturbed cultural deposits in the immediate vicinity of the roadways' intersection, but systematic assessment of the integrity of buried CA-LAN-229 deposits along the road shoulders within the proposed project planning area has not been undertaken. Excavations within CA-LAN-229 west of Las Virgenes Road indicated that the site contains cultural remains that " yield information important in prehistory," and therefore the site is considered potentially eligible for listing in the NRHP under eligibility criterion D.

CA-LAN-44 was initially recorded in 1961 during construction of a Stokes Creek overflow channel to the southeast of the project planning area. The cultural deposit included fire hearths, mortars, and pestles, and was considered to be a village site largely buried by recent alluvium. Evidence of the buried CA-LAN-44 cultural deposit was verified in 1975 by archaeologist George Toren. The significance of the site has not been formally assessed nor have the site boundaries been identified by archaeological investigation. Given that the site is partly buried under natural soils, it is reasonable to assume that it has not been disturbed by recent development, except for the Stokes Creek drainage improvements. The relatively intact aspect of the site suggests that it could contain cultural remains that may yield information important in prehistory and is potentially eligible for listing in the NRHP under eligibility criterion D.

CA-LAN-654 was identified in 1975 based on the presence of several flakes and a mano fragment on the ground surface (Soka University, Revised Draft EIR, SCH 91081028). Several of the artifacts appeared to have been transported to the ground surface by ground squirrels, such that the site also may be buried under recent alluvium. The significance of the site has not been formally assessed nor have the site boundaries been identified by archaeological investigation. Given that the site is probably buried under natural soils, it is reasonable to assume that it is has not been disturbed by recent development, except for the Stokes Creek drainage improvements. The relatively intact aspect of the site suggests that it could contain cultural remains that may yield information important in prehistory and is potentially eligible for listing in the NRHP under eligibility criterion D.

In addition to prehistoric archeological sites, the location of the 18th-century home of the original Las Virgenes grantee (Miguel Ortega) was somewhere near *Talepop*. In the late 1800s, Edward R. and

Edward C. Stokes homesteaded 320 acres in the Las Virgenes Valley, covering a portion of the future King Gillette Ranch. The approximate locations of the houses, corrals, and well of the Stokes brothers have been mapped from historic aerials and maps. Prior to Mulholland Highway, the original road traversed the ranch and connected to Las Virgenes Road several hundred yards south of the present intersection of Mulholland Highway and Las Virgenes Road. Any of these features may have the potential to yield information important to prehistory or history.

ETHNOGRAPHIC RESOURCES

Ethnographic resources are defined by the National Park Service as any "site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it" (Director's Order # 28, *Cultural Resource Management Guideline*). In the SMMNRA, ethnographic resources include village sites, burial grounds, pictographs, and landscapes that defined cultural uses. The most important known ethnographic resource within the project planning area is the archaeological deposit associated with the site of the Chumash village *Talepop*. Additional ethnographic resources are located west of Las Virgenes Road. Contemporary Chumash are actively involved in consultation with the National Park Service. They advocate for avoiding any adverse disturbance to the *Talepop* site.

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Effects on Archaeological Resources. No change in the treatment and management of archaeological resources within the Ranch area would occur as a result of Alternative A. Although no additional development or ground disturbance potentially impacting archaeological sites within the Ranch area would occur, continued public access and visitation would have the potential for indirect impacts including illicit collection of artifacts on the ground surface. Also, periodic future maintenance including Stokes Creek drainage improvements could result in additional direct impacts to buried deposits in CA-LAN-44 or CA-LAN-229.

There is a reasonable expectation of inadvertent discoveries of historic archeological sites by visitors or employees recreating or performing routine maintenance work in the project planning area. The location of the home of the original Las Virgenes grantee (Miguel Ortega) was somewhere near *Talepop*. The approximate locations of the houses, corrals, and well of the Stokes brothers have been mapped from historic aerials and maps. Prior to Mulholland Highway, the original road traversed the ranch and connected to Las Virgenes Road several hundred yards south of the present intersection of Mulholland Highway and Las Virgenes Road. Any of these features may be revealed through natural erosion, or road or utility work, and have the potential to yield information important to prehistory or history.

Alternative A could result in possible adverse, minor, long-term, and local impacts on archaelogical resources.

Effects on Ethnographic Resources. Under Alternative A, no change in the management and treatment of ethnographic resources or of Chumash cultural sites, traditions, and potential Native American practices in the Ranch area would result. Chumash consultation would continue to provide guidance and oversight. Alternative A could result in possible adverse, minor, long-term, and local impacts on ethnographic resources owing to potential impacts to the archaeological resources that compose the ethnographic resource.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on archaeological and ethnographic resources, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable future suburban and rural estate development projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. Implementation of these actions could result in adverse effects on cultural (archaeological and historical) resources. Individual compliance with applicable laws would reduce the potential disturbance, damage or degradation of unique archaeological or ethnographic resources. Overall, the combined past, present, and reasonably foreseeable actions within the project vicinity would have a potential adverse, minor, long-term, and regional impact on archaeological and ethnographic resources. Potential adverse impacts could be feasibly mitigated with appropriate assessment, monitoring, and curation of exposed resources. Such mitigation is typically required under individual project permit conditions and compliance with applicable laws protecting cultural resources.

CONCLUSIONS

There would be no change in the treatment and management of archaeological and ethnographic resources as a result of implementing Alternative A. Minor adverse effects could potentially occur to archaeologic and ethnographic resources under both Alternative A, and Alternative A in the cumulative impact scenario. There would be no impairment of archaeological or ethnographic resources or values as a result of implementing the No Action Alternative.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

Construction-related Effects to Archaeological and Ethnographic Resources. Potential effects on prehistoric archaeological sites would also affect ethnographic resources that contemporary Chumash value. Owing to the interrelationship of these resources, the following impact analysis addresses both subjects. It should be noted that the boundaries of unexcavated archaeological sites are inexact. Based on oral histories, archaeological artifacts, including burials, have been reported for CA-LAN-229 (Holmes, 2010). The potential exists during any ground disturbance associated with the Visitor Center project to find archaeological resources. NPS has an agreement with local Native American groups that would address inadvertent discoveries.

 Building improvements for use of the existing 6,000 sq. ft. Stable building for the SMMNRA Gateway Visitor Center. Ground disturbance associated with the new foundations would be located over 350 feet outside all recorded archaeological site boundaries. The nearest archaeological site, CA-LAN-44, is considered to be buried underneath recent alluvial soils. There is the potential that buried archaeological deposits could exist within the construction disturbance area associated with the Stable.

Utilities for the Stable building include installation of a new geothermal loop system proposed for heating and cooling the building. The system requires a pipeline from the Stable to the pump house near the pond. Installation would involve excavation of a trench placed approximately five to six feet underground. The pump house is located within feet of CA-LAN-44. Excavation has potential to encounter artifacts from this archaeological site.

- 2. Construction of two new structures adjacent to the Stable for public restrooms and storage (1,000 sq. ft.), and a future multipurpose visitor-services building (950 sq. ft.). Ground disturbance associated with the new foundations and utilities would be located over 325 feet outside all recorded archaeological site boundaries. The nearest archaeological site, CA-LAN-44, is considered to be buried underneath recent alluvial soils. CA-LAN-229 is approximately 450 feet from this component. There is the potential that buried archaeological deposits could exist within the Stable expansion footprint.
- 3. Construction of a new amphitheatre for Visitor Center programs. This improvement is approximately 175 feet from the CA-LAN-229 site boundary. The amphitheatre would be incorporated into the natural contours of the knoll to minimize ground disturbance.
- 4. Construction of a paved driveway and 50-space public parking lot with four bus spaces and other circulation improvements adjacent to the Stable. This improvement extends 200 to 250 feet from the Stable, and is between the recorded boundaries of archaeological sites CA-LAN-229 and -44. The estimated depth of proposed disturbance would be no greater than six to 12 inches.
- 5. Widening of existing entry gate (relocate or reconstruct western section of wall) and entrance road to accommodate two-way traffic.. The existing Ranch entry gate and access road are adjacent to the recorded CA-LAN-229 site boundary. The site boundary has not been precisely delineated. It is possible that CA-LAN-229 deposits are buried under alluvium east of Las Virgenes Road. The depth of proposed disturbance is estimated to be no greater than 12 inches.
- 6. Stormwater runoff control and treatment improvements for Visitor Center area. Excavation for stormwater collection facilities, including bioswales adjacent to the proposed parking area, and drainage swales east of the entrance road and northwest of the Stable building are between sites CA-LAN-229 and CA-LAN-44. Depending on the design of the drainage swale northwest of the Stable building, runoff deflected by the swale has the potential to adversely effect archaeological resources by accelerating erosion of the alluvial cap currently covering CA-LAN-229 west of the proposed swale. Modification of design is preferable to mitigation of impacts; therefore, the proposed resource protection measures listed in (Table 5) require a finalized design that avoids erosional impacts on adjacent archaeological resources. Additionally if artifacts are encountered during construction of the swale, the proposed resource protection measures for monitoring and curation would be employed.

Table 5 prescribes a resource protection measure requiring professional archaeological monitoring during all ground disturbance. If artifacts are encountered in situations 1-6, the proposed resource protection measures in Table 5 for monitoring and curation should be employed, thereby reducing impacts on archaeological and ethnographic resources to an adverse, minor, long-term, and local level.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on archaeological and ethnographic resources, the impacts of the project were considered in conjunction with the impacts of past, current, and foreseeable future projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. In particular, other residential and commercial development projects have been or would be required to comply individually with applicable laws. Therefore, the potential disturbance, damage or degradation of unique archaeological or historic resources could be reduced. Overall, with appropriate mitigation, the past, present, and reasonably foreseeable actions could have an adverse, minor, long-term, and regional impact on archaeologic and ethnographic resources.

CONCLUSIONS

Alternative B features several actions that, with incorporation of resource protection and mitigation measures prescribed in Table 5, would result in adverse, minor, long-term, and local effects on archaeological and ethnographic resources. Alternative B in conjunction with past, present, and reasonably foreseeable projects, would result in a cumulative, adverse, minor, long-term, and regional impact on archaeological and ethnographic resources. There would be no impairment of SMMNRA archaeological and ethnographic resources or values as a result of implementing the Preferred Alternative.

In accordance with NHPA Section 106 requirements and with mitigation as proposed in Table 5, NPS finds this project would have no adverse effect on archaeological and ethnographic resources.

3.2.5 ENERGY USE, CONSERVATION POTENTIAL, AND SUSTAINABLE DESIGN

REGULATIONS AND POLICIES

The regulations and policies associated with the evaluation of park operations and energy use and conservation are found in *Management Policies 2006* (NPS 2006).

AFFECTED ENVIRONMENT

SMMNRA's dry Mediterranean environment provides ample sunlight for solar energy production. Mild climate, moderated by proximity to the thermal mass of the Pacific Ocean, keeps heating and cooling needs low. However, low annual precipitation requires the park and surrounding urban development to depend on imported water. Such water has a high environmental footprint, due to the energy and infrastructural costs associated with transporting it from sources in the Sierra Nevada, Northern California, and the Colorado River, as well as the effects of removing water from these ecosystems. Ultimately, some of this imported water is introduced into local creeks in the form of urban runoff and

treated wastewater. The ecosystem, which is accustomed to clean water in a seasonal flow regime, is disrupted by the perennial source of polluted, nutrient-laden water.

Guiding Principles of Sustainable Design (NPS 1993) directs National Park Service management philosophy. It provides a basis for achieving sustainability in facility planning and design, emphasizes the importance of biodiversity, and encourages responsible decisions. The guidebook articulates principles to be used in the design and management of visitor facilities that emphasize environmental sensitivity, use of nontoxic materials, resource conservation, recycling, and integration of visitors with natural and cultural settings. SMMNRA is taking steps to help achieve the NPS goal of carbon-neutrality and to reduce water consumption. The NPS Diamond X Student Intern Center, currently under construction, employs environmentally friendly LEED construction techniques and sustainable operational features.

Sustainability principles have been developed and are followed for interpretation, natural resources, cultural resources, site design, building design, energy management, water supply, waste prevention, and facility maintenance and operations. The group of technologies used to provide increased sustainability in structures and facilities is referred to as "green technologies."

Energy efficiency is incorporated into the decision-making process during the design and acquisition of buildings, facilities, and transportation systems that emphasize the use of renewable energy sources. The Stable, Print Shop, and Gatehouse were designed and constructed prior to both acquisition of the property by NPS and the development of the National Park Service policies regarding sustainability. These structures are not in compliance with current NPS policy. However, where applicable, replacements or repairs made to these buildings would meet current policy requirements.

The Stable was built at a time prior to use of mechanical heating and cooling systems, and consequently was designed with architectural features to enhance cooling and heating needs. Its thick adobe wall construction has a high thermal mass that keeps the building cooler during the day and warmer at night.

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Alternative A would not include any substantial efforts to use sustainable design principles or materials or conserve energy and resources in the project area. Underutilization of facilities and their sustainable design features would continue. There would be no construction-related impacts. No operational changes resulting in sustainable practices would result, either, resulting in adverse, negligible, long-term, local impacts on energy savings and sustainability.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on energy savings and sustainability, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable future suburban and rural estate development projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. Much of the development in the vicinity of King Gillette Ranch was constructed prior to

efforts to build using energy-saving features and "green" building materials. Today, green building practices are being adopted on a regional level. The recently constructed Calabasas City Hall and Library are LEED Gold certified structures. The city also has a green stewardship program. The County of Los Angeles has a green building program, and nearby Pepperdine University has a Center for Sustainability program that seeks to implement environmentally friendly practices on its Malibu campus. The Student Intern Center at Diamond X will have a LEED gold achievement status. Green building programs are just beginning to be constructed, however. Past development, in spite of more "green" development in the current timeframe, overwhelms the cumulative scenario for energy-saving and sustainable technologies. In conjunction with the past and present projects, the No Action Alternative would have a cumulative, adverse, moderate, long-term, regional impact on sustainability and energy conservation.

CONCLUSIONS

Alternative A would result in negligible adverse impacts to energy use, conservation potential, and sustainable design. The Stable would be underutilized as an abandoned structure. Visitor Center services would continue to be provided in an older, environmentally more inefficient building located outside the national recreation area in Thousand Oaks.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

Construction-related Effects. Beneficial impacts to sustainability that would be realized during construction would occur from the following sustainable design features and practices.

- Reuse of an existing building: Adaptive reuse reduces both waste from building demolition and the amount of materials required for new facilities.
- Sustainable construction waste management: 75% of waste recycled or salvaged
- Recycled content in building materials: 20% of content
- Locally sourced materials: Smaller carbon footprint and reduced embodied energy due to lower transportation requirements
- Sustainably-sourced and certified wood

Operation-related Effects. Many of Alternative B's features result in substantial operational savings with respect to water use, energy use, and wastewater treatment. Sustainable design features include:

- 70 kW photovoltaic system: Provides enough energy to meet Visitor Center needs. Surplus electricity would used for other structures at King Gillette Ranch, or may be sold to Southern California Edison grid for use by other consumers, providing a net green energy source.
- Ground loop geothermal heating and cooling system

- Solar hot water
- Recycled water for irrigation
- Recycling water system and low-evaporation design for visitor orientation plaza fountain

The project is designed to achieve the following sustainability certifications and metrics:

- LEED Platinum Rating (Highest Possible)
- Significantly exceeds federal energy standards
- 50% greater savings than ASHRAE (heating, ventilation, and air conditioning) standards
- Net-zero energy consumption

Overall, Alternative B would result in beneficial, moderate, long-term, and local impacts on energy savings and sustainability.

CUMULATIVE IMPACTS

The cumulative impact scenario for Alternative B would be the same as for Alternative A. The numerous energy-saving and sustainable building programs throughout Los Angeles County and in municipalities near King Gillette Ranch, in conjunction with the green design features proposed for the Visitor Center in Alternative B, would have beneficial impacts by reducing energy consumption. However, the "green" projects are, as yet, overshadowed by the extent of past, non-green development in the region. In conjunction with the past and present project history, Alternative B would have a cumulative, adverse, moderate, long-term, regional impact on sustainability and energy conservation.

It should be noted that, while the cumulative beneficial effects of regional green projects and Alternative B are negligible on a global scale, the level at which climate impacts occur, the energy reduction and sustainability measures incorporated into this project help to reverse a general global trend of policies and actions which have a larger adverse environmental footprint.

CONCLUSIONS

Alternative B, the Preferred Alternative would have a long-term moderate beneficial impact on energy use, conservation potential, and sustainable design within the project planning area compared to Alternative A, No Action. Green design features and practices would make the building more environmentally friendly than if "standard" construction techniques and materials had been used. The Preferred Alternative would also increase the use of sustainable practices in the project area. Overall, Alternative B would result in a negligible, beneficial, long-term regional impact on energy savings and sustainability.

3.2.6 LAND USE

REGULATIONS AND POLICIES

SMMNRA GMP (2002), *Management Policies 2006* (NPS 2006); Federal Coastal Zone Management Act of 1972; California Coastal Act, Chapter 3; and the Los Angeles County Malibu Land Use Plan (1986) all guide land use at King Gilette Ranch and the Visitor Center project planning area.

AFFECTED ENVIRONMENT

When Congress established Santa Monica Mountains National Recreation Area, it was with the understanding that state and local agencies would participate significantly in managing land use in a manner that would be compatible with the resource protection and recreational goals for a unit of the National Park System. SMMNRA is within the jurisdictions of two counties, five cities west of the 405 Freeway, and is partially within the California Coastal Zone. While federal law generally trumps many state and local land use planning policies and laws, the jurisdictional relationship of the National Park Service with local land use management agencies is deferential and cooperative to the extent feasible. Local agencies have prepared their general plans, specific plans, coastal programs, and other land use policy documents with respect for the federal and state parkland setting in which they are situated, to the advantage of their constituents who enjoy the park amenities offered in SMMNRA.

Federal land use actions within designated Coastal Zones are subject to the federal Coastal Zone Management Act (CZMA) of 1972, the primary federal law enacted to preserve and protect coastal resources. The CZMA requires federal actions to be consistent with local coastal act policies and regulations. California has developed a coastal zone management plan and has enacted its own law, the California Coastal Act of 1976, to protect the coastline. The policies established by the California Coastal Act are similar to those for the CZMA; they include the protection and expansion of public access and recreation, the protection, enhancement and restoration of environmentally sensitive areas, protection of agricultural lands, the protection of scenic beauty, and the protection of property and life from coastal hazards. The California Coastal Act. The most current local document for implementation and oversight of the California Coastal Act. The most current local document for implementing the Coastal Act is Los Angeles County's 1986 Malibu Land Use Plan. Currently, Los Angeles County approved an updated, complete Local Coastal Program (LCP) for the Santa Monica Mountains in 2007. The LCP will not be effective until it has been certified by Coastal Commission at a future date. Meanwhile, the Malibu LUP is still used by Coastal Commission for assessing land use proposals, and the policies contained within the plan are considered in designing the proposed Visitor Center project.

King Gillette Ranch is located in the Las Virgenes Valley area of unincorporated Los Angeles County. It is bordered on the north and east by Mulholland Highway, Las Virgenes Road on the west, and Las Virgenes Canyon Road on the south. Land to the north, east, and south is low density single-family residential situated among undeveloped private open space or protected parkland. Malibu Creek State Park is west of the Ranch. The Ranch, including the 18-acre project planning area, lies wholly within the California Coastal Zone. The 18-acre project planning area for this EA is designated in Los Angeles County's Malibu Land Use Plan (LUP) for "Low-Intensity Visitor-Serving Commercial Recreation, with a small area within the "Institution and Public Facilities" designation (Figure 10).

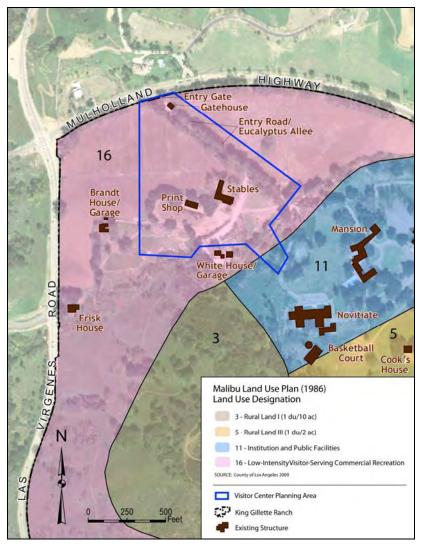


Figure 10. Malibu Land Use Plan-Land Use Designation for Project Planning Area

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Land use at King Gillette Ranch, including the project planning area for the Visitor Center, would continue to offer public interpretive programs, informal recreational trail access, and revenue-generating permitted special events and filming. All land uses are consistent with allowed uses under the effective land use prescription in the Malibu LUP for "Low-Intensity Visitor-Serving Commercial Recreation" and "Institution and Public Facilities" designations. There would be no impact on land use under Alternative A.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on land use, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable future projects in the park, as summarized under cumulative impact contributors in Section 3.1.1. Past land use was approved at levels exceeding prescribed land use, resulting in suburbanization of a natural area along the gateway route of Las Virgenes Road into SMMNRA. Land use approvals currently have stayed generally within prescribed densities and with conditions assigned to the extent feasible to protect park resources. Proposed development projects included in Appendix B are generally located adjacent to existing development in Calabasas or Malibu. Subdivision of land on the north side of Mulholland has the potential to change the viewshed from mostly open space to medium-density, suburban-level residential land use, with a negative effect on the visitor-serving recreational setting at the project planning area. Overall, the past, present, and reasonably foreseeable development actions would have an adverse, moderate, long-term, local impact impact on land use around the project planning area owing to potential visual impacts and additional traffic generation. Alternative A, in combination with the past, present, and reasonably foreseeable actions collectively would result in an adverse, moderate, long-term, local impact on land use, with Alternative A not contributing to any cumulative impact.

CONCLUSIONS

Alternative A, alone, would have no impact on land use owing to the consistency of the current land use with prescribed land use in the Malibu LUP. Alternative A would have a cumulative adverse, moderate, long-term, and local impact on land use in combination with other past, present, and foreseeable development projects.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

The proposed Visitor Center and its associated facilities are all visitor-serving amenities. As such, the land use that would occur under the Preferred Alternative would be consistent with the Malibu LUP, and thus would meet the intent of the federal (CZMA) to have federal projects be consistent with local Coastal Zone management programs, such as the California Coastal Act in terms of land use. A federal consistency determination will still be prepared to assess Alternative B's consistency with other Coastal Act policies in Chapter 3. No impact on land use would occur because of actions proposed in Alternative B.

CUMULATIVE IMPACTS

The cumulative analysis would be identical to that under Alternative A, because the current and proposed land use under Alternative B would remain unchanged, except that visitor-serving infrastructure would be constructed, and more public visitation would ensue. The result would still be an adverse, minor, long-term, local impact on land use, with Alternative B not contributing to any cumulative impact.

CONCLUSIONS

Alternative B, alone, would have no impact on land use owing to the consistency of the current land use with prescribed land use in the Malibu LUP. In combination with effects of past, present, and foreseeable projects, Alternative B would have a cumulative adverse, moderate, long-term, local impact on land use, although Alternative B would contribute negligibly to the cumulative impact.

3.2.7 PARK OPERATIONS

REGULATIONS AND POLICIES

The regulations and policies associated with the evaluation of park operations and energy use and conservation are found in *Management Policies 2006* (NPS 2006). The Cooperative Management Agreement (CMA) among NPS, CDPR, MRCA and SMMC provides the framework for joint planning management of King Gillette Ranch.

AFFECTED ENVIRONMENT

SMMNRA was conceived by Congress as being cooperatively managed by the NPS and state and local units of government. Parkland management and visitor services associated with SMMNRA are primarily provided by NPS, CDPR, MRCA, and SMMC. Park staff from the four agencies provide the full scope of functions and activities to accomplish management objectives and meet requirements of law enforcement, emergency services, public health and safety, science, resource protection and management, visitor services, interpretation and education, utilities, and management support. The partner agencies currently manage 73,450 acres of over 83,000 acres of public parkland throughout SMMNRA, with NPS managing 23,302 acres.

At King Gillette Ranch, current park operations are mostly performed by MRCA staff with NPS contributing supplemental interpretive programs and planning services as prescribed in the CMA. MRCA staff that cover Ranch operational needs are based at the Ranch, including one to two employees with shop space in the Print Shop. NPS staff are based at other NPS sites, including the headquarters in Thousand Oaks, Diamond X Ranch, and Paramount Ranch.

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

No change in park operations would occur under Alternative A. MRCA staff would continue to have office space at the Ranch and provide maintenance, law enforcement, and interpretive program services. NPS Interpretation Division staff would continue to provide additional public programs at the Ranch, while remaining based at NPS headquarters in Thousand Oaks. Staffing needs and operational costs would generally remain unchanged. Therefore, there would be no impacts to park operations under Alternative A.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on park operations, the impacts of the No Action Alternative were considered in conjunction with the impacts of past, current, and foreseeable future projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. Parkland acquisition and other park management plans are the primary contributors to park operational cumulative impacts. Past and present park operational responsibilities have accumulated over the years from continuing parkland acquisition within SMMNRA by state, federal, and local agencies. Funding for park operations has been perennially minimal for meeting park needs, and park staff are stretched to cover all operations. Volunteer assistance contributes to accomplishing park operational requirements, particularly trail maintenance. The past, present, and foreseeable projects that comprise the cumulative impact scenario generate an adverse, moderate, long-term, and local (SMMNRA-wide) impact on park operations. Under Alternative A, the No Action Alternative, the partner agencies would not pursue the Visitor Center. When considered with park acquisition and other park management plans, there would be no cumulative impacts from Alternative A owing to no change in the contribution to park operations from agency management at King Gillette Ranch.

CONCLUSIONS

Under Alternative A, staffing needs and operational costs would generally remain unchanged. Therefore, there would be no impacts to park operations under Alternative A. Alternative A would also have no cumulative impact on park operations.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

Construction and operation of the proposed Visitor Center project would alter the current distribution of MRCA and NPS park operation responsibilities at King Gillette Ranch as described in Section 2.2.2, Park Operations for Alternative B. MRCA maintenance staff working out of the Print Shop would be relocated. Some NPS interpretive rangers would shift their operational base from NPS headquarters and the visitor center Thousand Oaks to the Visitor Center at King Gillette Ranch. NPS maintenance staff would take on new routine and cyclic maintenance responsibilities at the new Visitor Center. Additional contracted services would be required to run the Visitor Center, including but not limited to, possible costs for utility maintenance, building and grounds custodial care, and security services.

Construction-related impacts. NPS staff would have additional project oversight responsibilities during the Visitor Center construction phase when working with the NPS Project Manager and construction contractors to ensure resource protection, visitor safety, and construction logistics are handled efficiently. Time spent on the Visitor Center project would displace time spent on other park projects and management needs. Impacts on park operations would be adverse, moderate, short-term, and local.

Operation-related impacts. NPS and the partner agencies would accrue long-term interpretive and maintenance staffing responsibilities for operating the Visitor Center. Given the perennial shortage of funding for staff and maintenance, mitigation is needed to offset the already stretched staffing and

maintenance resources allocated to SMMNRA. In Table 5, Resource Protection Measures, a condition has been recommended to seek NPS base funding for maintenance costs and staffing at the Visitor Center. With the prescribed condition, impacts on park operations under Alternative B would be held at an adverse, moderate, long-term, and local level.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on park operations, the impacts of Alternative B, the Preferred Alternative, were considered in conjunction with the impacts of past, current, and foreseeable future projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. Parkland acquisition and other park management plans are the primary contributors to park operational cumulative impacts. Past and present park operational responsibilities have accumulated over the years from continuing parkland acquisition within SMMNRA by state, federal, and local agencies. Funding for park operations has been perennially minimal for meeting park needs, and park staff are stretched to cover all operations. Volunteer assistance contributes to accomplishing park operational requirements, particularly trail maintenance. The past, present, and foreseeable projects that comprise the cumulative impact scenario generate an adverse, moderate, long-term, and local (SMMNRA-wide) impact on park operations. Under Alternative B, the NPS in cooperation with the other partner agencies would pursue construction and operation of the proposed Visitor Center. When considered with ongoing parkland acquisition efforts and other park management plans, Alternative B would result in a cumulative adverse, moderate, long-term, local impact on park operations and operational park operations owing to the additional operational needs generated by a new park facility—the proposed Visitor Center.

CONCLUSIONS

Under Alternative B, staffing needs and operational costs would increase during construction and operation phases of the proposed project, thus requiring additional funding to maintain safe, clean, and functioning facilities with adequate staff to serve the public. With the prescribed condition to seek additional base funding for Visitor Center operation, impacts on park operations under Alternative B would be held at an adverse, moderate, short-term and long-term, local level. Owing to the ongoing shortfall of funding for park operations throughout SMMNRA, Alternative B would contribute an adverse, moderate, long-term, and local cumulative impact on park operations.

3.2.8 PUBLIC HEALTH AND SAFETY

REGULATIONS AND POLICIES

The policies and rationale associated with the retention of public health and safety for evaluation as an impact topic are found in *Management Policies 2006* (NPS 2006), Coastal Zone Management Act, California Coastal Act, *Malibu Land Use Plan* (LACDRP 1986).

AFFECTED ENVIRONMENT

The dramatic beauty of SMMNRA is enchanting, yet the enchanting landscape belies the risks to public health and safety owing to hazards from fire, flood, and seismic shaking. King Gillette Ranch and the 18-acre Visitor Center project planning area within the Ranch are subject to these natural disasters.

WILDFIRE

The chaparral-blanketed mountainsides SMMNRA are part of a fire-dependent ecosystem. The Santa Monica Mountains are classified by Los Angeles County as a "Very High Fire Hazard Serverity Zone" in accordance with the Bates Bill (California AB 337, 1992). Thirteen major wildfires have burned across portions of the Santa Monica Mountains between 1925 and the present (NPS 2005). King Gillette Ranch is located in an area subject to potential damage or destruction from wildfire. Between 1970 and the present, four wildfires have burned portions of the property, (Wright Fire, 1970—28,200 acres; Calabasas Fire, 1996—12,189 acres; Malibu Fire 1997—3 acres, 2008; and Malibu Fire, 2008—51 acres). All four wildfires burned only native habitat on King Gillette Ranch. The "cultural core" developed area, including the 18-acre project planning area, were successfully defended and have not burned. Fuel modification activities are currently conducted on the property to protect existing structures from wildfire, consistent with Los AngelesCounty Fire Department requirements. The fuel modification zones exceed the defensible space recommendations included in the SMMNRA Fire Management Plan (NPS 2005). The project planning area is surrounded primarily by low fuels consisting of disturbed, nonnative grassland. Access to the property is provided via a number of driveways off Mulholland Highway and Las Virgenes Road that may be used for emergency ingress/egress.

FLOODING

King Gillette Ranch occupies a broad alluvial terrace in the middle reach of Malibu Creek Watershed. This terrace is formed at the point where Las Virgenes Canyon is joined by two other narrow canyons – Liberty Canyon from the northwest and Stokes Canyon from the northeast – before it widens into a small valley.

The intermittent streams which drain these tributary canyons all come together within this valley and meander through the terrain for a mile or more before joining Malibu Creek in the southwest portion of the valley within Malibu Creek State Park. Stokes Creek runs east-west to the south of the project planning area. The creek is ephemeral, but is subject to flooding during heavy rainfall events.

Sheet flow across the agricultural fields in the north and eastern areas of the project planning area during heavy rain events causes ground saturation and occasional minor flooding around the Stable building.

SEISMIC SHAKING

Geologic hazards common to the Santa Monica Mountains include landslides, erosion, and earthquakes. Subsurface investigation of the property through exploratory borings was conducted by previous property owners which identified no active or potentially active faults on the site (N&M 2009). The investigation revealed that the earth materials on the site consist of minor fills, topsoil, colluvium, recent alluvial fanglomerate and flood plain deposits, terrace deposits, and bedrock, and that old fill is present in small amounts across the site and is associated with grading of the existing access roads and other construction activities in the past. Fill areas are generally thin (two to four feet deep) although deeper fills associated with the construction of Mulholland Highway also exist on site. The previous geologic study concluded that: "Old fill on the site is considered compressible and/or subject to hydroconsolidation." Most of the site is mantled by topsoil, which is generally one to four feet thick. Thicker deposits of topsoil have accumulated in swales and near the toes of slopes, more appropriately termed colluvium.

Areas of alluvium also exist on the site, which are divided into alluvium in active channels, flood plain deposits, fan deposits, and undifferentiated alluvium. The alluvium becomes denser and more competent with depth.

Within most of areas of southern California, there are two primary seismic considerations: 1) surface rupturing along fault lines, and 2) damage to structures due to seismically induced ground shaking. Other seismic considerations include liquefaction, landslides, rockfalls, and seismically induced settlement. Although there are no known active or potentially active faults on or adjacent to the site, there are various faults in close proximity that could cause ground shaking at King Gillette Ranch in the event of an earthquake. They include the Malibu-Santa Monica-Raymond Hill fault system (approximately five miles from site), which poses a potentially substantial risk of earthquake damage in the general area; the Simi-Northridge-Verdugo fault system (approximately 13 miles from site), which may also affect the area; and the San Andreas Fault (approximately 42 miles from site), which, although located at a greater distance from the planning area than the other identified faults, poses a potentially substantial risk of seismic damage throughout the area (LACDRP 2000).

HAZARDOUS MATERIALS

A hazardous material is any substance that possesses qualities or characteristics that could produce physical damage to the environment and/or cause deleterious effects upon human health. A material may be classified as hazardous if it has any of the following properties: flammable, combustible, explosive, corrosive, strongly oxidizing, strongly acidic, or basic (extreme pH value), toxic, radioactive, etc.

Hazardous materials include petroleum products (including oil and gasoline), automotive fluids (antifreeze, hydraulic fluid), paint, cleaners (dry cleaning solvents, cleaning fluids), and pesticides from agricultural uses (if in sizeable concentrations). Byproducts generated as a result of activities using hazardous materials (such as dry cleaning solvents, oil, and gasoline) are considered hazardous waste. Contamination usually takes the form of a hazardous materials or waste spill in soil. Such contamination can penetrate soils into the groundwater table, resulting in the pollution of a local water supply. Commercial uses, particularly those using underground storage tanks (USTs), commonly create such contamination. With the remediation techniques currently in practice, soil contamination typically does not pose a serious health risk, unlike groundwater contamination.

Hazardous materials are extensively regulated by federal, state, and local laws. The potential presence of hazardous materials in the environment within or immediately adjacent to a project planning area is required to be assessed and identified as part of any land use permitting process. If hazardous materials are identified, further evaluation or remediation may be necessary, depending upon the substances present and their concentration. The following discussion inventories hazardous material conditions within the Visitor Center project planning area. In accordance with CEQA and NEPA, Phase I Environmental Site Assessments for Hazardous Materials were prepared for the draft EIR for Soka University's proposed campus expansion in 1996 (LACDRP 1996), for state and federal acquisition of King Gillette Ranch in 2004 (RCI 2004). Phase II testing and remediation surveys and projects were also implemented during the Soka University ownership era (LACDRP 1996). The following affected environment information is derived from the Phase I and II surveys.

SOIL CONTAMINATION - OIL AND GASOLINE

During Claretian Theological Seminary ownership and possibly before, auto and/or farm equipment maintenance was performed in the Stable building repair shop before a concrete slab foundation was poured. Crankcase oil was emptied into shallow pits and allowed to seep into the ground. Phase I surveys have not found evidence of oil or gasoline contamination under or around the Stable building, although current cement foundation prevents testing in this area (LACDRP, 1996, Appendix A, Report No. 1: GeoSoils, Inc. *Phase I Environmental Site Assessment*, March 24, 1992).

UNDERGROUND STORAGE TANKS (USTs)

A search of regulatory databases for sites with known or suspected hazardous material contamination, use of hazardous or toxic materials and regulated wastes, discharge or spillage incidents, discharge permits, landfills, and storage tanks for the site and surrounding area was performed as part of the 1996 Soka University Draft EIR (LACDRP 1996), and again in June 2009 (Environmental Data Resources, Inc. 2009), as part of the current environmental analysis. The search associated with the 1996 Draft EIR identified the Soka property as a hazardous waste generator due to the removal of asbestos from the property, and identified several other hazardous material conditions on-site that included on-site underground and above-ground storage tanks, on-site landfill, pesticide use associated with past agricultural uses, and soil contamination from previous auto repair and maintenance activities.

A number of the previously identified hazardous conditions located on the property were properly abandoned, remediated, or removed from the site, including removal of five USTs and abandonment inplace of a sixth UST (RCI 2004). In preparation for the King Gillette Ranch Design Concept Plan (DCP), a review of the U.S. Environmental Protection Agency's (US EPA's) regulatory databases indicated that there are hazardous material sites present within or in the vicinity of the Ranch property (EDR 2009). The search parameters were set to include any sources of hazardous material contamination on properties within a one-mile radius of the Ranch. It should be noted that in most cases, properties that are located at a distance of 1/4 mile or more (1,300 feet) have little potential to pose a risk or hazard; therefore the sites selected as having identified or potential contamination within 1/4 mile of the project planning area are of the greatest concern. The mile search radius is therefore far-reaching, but is appropriate for potential sources of groundwater or air toxins, which are more mobile in the environment. The findings are described as follows.

There were two records identified under the HIST UST (Historical Underground Storage Tanks) category. Camp Gonzales, located within 1/8 mile southwest of the Ranch property at 1301 Las Virgenes Road, was listed in the HIST UST registered database as a site with two underground storage tanks used for fuel storage (diesel and regular) installed in 1962. No leaks were identified at the site and it is not on the LUST (Leaking Underground Storage Tank) list. The second recorded site is shown as the Summit Lighthouse, located at 26800 West Mulholland Highway. It appears that this site is the existing and vacant Stable building at the Ranch, which was previously used as a graphics building and/or

publishing facility in the late 1970s and early 1980s. The site was listed in the HIST UST registered database as a site with an underground storage tank used for photography waste. No leaks were identified at the site and it is not on the LUST (Leaking Underground Storage Tank) list. This tank has not been located after several attempts by contractors employed by Soka University, and was presumed removed in 1992, with its status recorded as "Closed" in 1993 (RCI 2004).

There was a single record identified in the local computerized regulatory database search, under the SWEEPS UST (Statewide Environmental Evaluation and Planning System Underground Storage Tank) category. Los Angeles County Maintenance Department at Camp Gonzales, located within 1/8 mile southwest of the Ranch property at 1301 Las Virgenes Road, was listed in the SWEEPS UST registered database as a site with several underground storage tanks used for latex, solvent, and alkaline solution with metals, which are either recycled or taken to a transfer station for proper disposal. No leaks were identified at the site and it is not on the LUST (Leaking Underground Storage Tank) list.

ASBESTOS-CONTAINING MATERIALS

Asbestos-containing materials (ACMs) are materials that contain asbestos, a naturally-occurring fibrous mineral that has been mined for its useful thermal properties and tensile strength. ACM is generally defined as either friable or non-friable. Friable ACM is defined as any material containing more than one percent asbestos. Friable ACM is more likely to produce airborne fibers than non-friable ACM, and can be crumpled, pulverized, or reduced to powder by hand pressure. Non-friable ACM is defined as any material containing one percent or less asbestos. Non-friable ACM cannot be crumpled, pulverized, or reduced by hand pressure. When left intact and undisturbed, non-friable ACM do not pose a health risk to building occupants. Potential for human exposure only occurs when ACM becomes damaged to the extent that asbestos fibers become airborne and are inhaled.

According to the Asbestos and Lead-Based Paint Survey prepared in November 2009 for the Stable building, a number of samples of on-site materials were analyzed for the presence of asbestos-containing materials (interior plaster, 12x12 white vinyl floor tiles and mastic in the restroom/hallway, window putty, exterior stucco, and roofing materials). Positive asbestos results were detected in samples collected from the 12x12 white vinyl tiles and mastic in the restroom, the vinyl sheet flooring in the hallway, the window putty on the exterior windows, and the roof penetration mastic in the Stables building. As a result, removal procedures would be required pursuant to the California Air Resources Board's (CARB) Airborne Toxic Control Measure for Emissions of Asbestos from Construction, Grading, Quarry, and Surface Mining Operations.

LEAD-BASED PAINT

No lead paint was detected in the Stable building or Print Shop (Rincon 2010).

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Effects of Wildfire Hazards. The project area would continue to support park maintenance and limited office operations, public programs including outdoor recreation, and ranger activities. The Stable building would remain vacant and susceptible to ignition from ember accumulation. The No Action Alternative would continue to expose park facilities, visitors and park employees to wildfire hazards resulting in an adverse, moderate, long-term, local impact.

Effects of Flooding. Structures within the project planning center are outside the FEMA-mapped 100year floodplain. The Stable building is vacant and closed to the public. Public programs, such as birdwatching, that may involve activities near Stokes Creek, are cancelled when rain is likely. Therefore, under Alternative A, there would be no impacts on public health and safety from flooding.

Effects from Seismic Shaking. The project planning area would remain similar to existing conditions. The project area would continue to be susceptible to earthquake ground shaking, particularly from seismically active faults in the region. This condition would continue under the No Action Alternative. Although the expected ground motion would be low compared to those in areas closer to the causative faults, the ground acceleration possible during a substantial earthquake would be felt by visitors at the Ranch and would cause varying levels of damage. During an earthquake, structures could suffer substantial damage. Under the No Action Alternative, the Stable building would remain vacant and closed to public access. The Print Shop would continue to serve as a maintenance office and storage area. Park employees could be present in the Print Shop during an earthquake. Public programs within the project planning area take place out in the open, thus the potential for injury from falling buildings is avoided. Earthquakes occur without warning, therefore seismic shaking presents the potential to injure park visitors and agency employees at any time and cannot be avoided with the current state of structures and typical programs offered within the project planning area. Therefore, Alternative A would result in a continuing adverse, moderate, long-term, and local impact.

Effects from Hazardous Materials. Under Alternative A, the Stable building would remain vacant and closed to the public. No visitors would be exposed to asbestos found in the building. There are no other hazardous materials present that might affect public health and safety. Under Alternative A, there would be no impacts from hazardous materials on public health and safety.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on public health and safety, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable future suburban and rural estate development projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. Cumulative development in the Santa Monica Mountains would have the potential to place more people into a wildland fire hazard area. Impacts from wildland fires directly affect individual homeowners with the loss of life and property, although the cumulative indirect effect is the cost borne by state and federal taxpayers for disaster assistance to the homeowners. Additional development in Calabasas, north of the project planning area, creates additional impervious surface that exacerbates downstream flooding intensities. The proposed new development, however, is proportionally small compared to the area in upper Malibu Creek Watershed that has already been "hardscaped" with extensive suburban development. New development adds new structures that can fall during seismic shaking, thus increasing the chance for more human injury than without the new development. Cumulative impacts on public safety from wildfire, flooding, and seismic hazards under Alternative A would be adverse, moderate, long-term, and regional, with impacts on public health and safety, with potential for injury to visitors at King Gillette Ranch contributing negligibly to the impacts.

Impacts associated with hazardous materials are site-specific and generally are discovered by regulatory agencies that assign monitoring and remediation measures. In the vicinity of King Gillette Ranch, there are no land uses with the potential to disperse hazardous materials that would have the potential for major effects on public health and safety. Cumulative impacts on public health and safety from exposure to hazardous materials would be adverse and negligible under Alternative A.

CONCLUSIONS

Overall, Alternative A would have an adverse, moderate, long-term, and local impact on public health and safety associated with natural disasters, particularly seismic shaking; no impacts from hazardous materials. Cumulative impacts would be adverse, moderate, long-term, and regional for natural disasters, and negligible for hazardous materials exposure, with Alternative A contributing negligibly to the cumulative scenario.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

Effects of Wildfire. Under Alternative B, establishment of a full-service Visitor Center is expected to generate an increase in park visitors and park employees, thus exposing more people to wildfire hazards than under current conditions. However, as noted in the Affected Environment, no loss of property has occurred within the project planning area, although two major fires burned entirely around the developed "cultural core" of the Ranch. Adequate defensible space and the low fuel load of the surrounding non-native grassland fields has contributed to successful defense against wildfires. The defensible space zones at the Ranch exceed the recommendations for defensible space provided in the SMMNRA Fire Management Plan (NPS 2005). For the safety of visitors and staff in the Stable building, an emergency sprinkler system would be included in building modifications to meet public safety standards and reduce the building's susceptibility to ignition from lodged firebrands. The new restroom/storage and future multi-purpose buildings would be constructed using fire-safe design features to maximally reduce the chances for the building to succumb to radiant heat, firebrands, or other means of ignition for wildfire. To safeguard the public, particularly groups of schoolchildren participating in proposed interpretive or education programs, the resource protection measures prescribed in Table 5 include a mitigation measure requiring preparation of a fire management and evacuation plan for the Visitor Center. Alternative B may bring more visitors into the fire-prone Santa Monica Mountains at King Gillette Ranch. However, with routinely performed defensible space fuel modification, fire safety design features and improvements to the Stable building, and with implementation of a fire management

and evacuation plan, Alternative B would result in beneficial, minor, short-term, local impacts on public health and safety associated with wildfire.

Effects of Flooding. The proposed facilities for the Visitor Center are outside the FEMA-mapped 100year floodplain. Public programs may temporarily place visitors near Stokes Creek, but such outdoor programs are generally cancelled when rain is likely. The proposed stormwater drainage system is planned to address the occasional, minimal, sheet flow-generated flooding that affects the Stable building. No construction-related or operation-related activities would affect public safety associated with flooding. Therefore, there would be no impacts on public health or safety from flooding.

Effects of Seismic Shaking. A recent *Preliminary Geotechnical Evaluation* was conducted in September 2009 (N&M 2009) for the proposed Visitor Center at the Ranch. The report's conclusions and recommendations generally support the conclusions of the earlier geotechnical evaluations and state that, although the proposed project is feasible from a geologic standpoint, a number of geologic conditions or issues would require further evaluation to ensure that potential geologic hazards are properly mitigated. The primary geologic issue on-site that could exacerbate effects of ground-shaking was the presence of relatively recent alluvial deposits combined with a shallow groundwater levels, leading to a condition of potential liquifaction (N&M 2009). Such conditions would require treatment of near-surface soils and fill and compaction prior to construction.

Under Alternative B, the Stable building would be modified to bring the structure up to current California Building Code (CBC) seismic safety codes. The building would become occupied and open to the public. The new restroom/storage building and future multi-purpose structure would also be constructed to CBC seismic safety codes. Nevertheless, earthquakes occur without warning and without predictability of their intensity level, and additional persons, compared to the No Action Alternative, would be brought into contact with buildings in the Visitor Center Services Area. Alternative B has been designed to implement seismic protection standards and codes for public safety. Alternative B would have adverse, minor, long-term, local impacts on public safety owing to the introduction of additional people into existing and proposed new structures in an earthquake-prone region, although the adverse impact from increase in visitors is somewhat offset by a beneficial impact from incorporating seismic safety design features into the Stable building and new building construction.

Effects of Hazardous Materials. Under Alternative B, the proposed use and rehabilitation of the Stable building and construction of other structures in the Visitor Center Services Area would provide for expanded public access and programs at the Ranch. Hazardous materials (e.g., paints, solvents, cleaning products, pesticides, and herbicides) currently do not exist on-site, with the exception of possible petroleum-based products under the concrete foundation in the north wing of the Stable building. Resource protection measures have been prescribed in Table 5 to require soil testing, and if necessary, remediation of any contaminated soils when the existing slab is removed and replaced, as is proposed. Stable building modifications would remove any asbestos-containing materials and lead paint. Any herbicides that might be proposed for non-native plant eradication in the project planning area would require approval through the NPS's Integrated Pest Management Program. New building construction includes use of sustainable building materials that would avoid or reduce the typical outgassing of volatile organic chemicals associated with building materials such as carpeting or paint.

Alternative B would have beneficial, minor, long-term, and local impacts on public health and safety owing to potential elimination of existing hazardous materials associated with the Stable building and construction with new, sustainable building materials.

Construction-related Effects. Construction and demolition activities could produce low levels of risk to visitors and staff. The use of construction equipment, increased truck traffic, and brief interference with traffic flow could produce potential hazards. Risks would be limited by resource protection measures prescribed in Table 5, including providing information on the actions to visitors, placing barriers near construction zones, controlling traffic, and increasing ranger presence. Overall, project implementation would produce adverse, negligible-to-minor, short-term, local impacts on public health and safety.

CUMULATIVE IMPACTS

The cumulative impact scenario for Alternative Be would be similar to that discussed under Alternative A. The scenario is the same, although the impacts would differ somewhat owing to the proposed construction and operation of new facilities under Alternative B. Past, present and future actions in the vicinity of King Gillette Ranch, when considered with Alternative B, could contribute to adverse, negligible to moderate, long-term and regional cumulative impacts on public health and safety.

CONCLUSIONS

Alternative B would have adverse, minor, long-term, local impacts on public safety owing to the introduction of additional people into existing and proposed new structures in an earthquake-prone region, although the adverse impact from increase in visitors is balanced by a beneficial impact from incorporating seismic safety design features into the Stable building and new building construction. Alternative B would have beneficial, minor, long-term, and local impacts on public health and safety owing to potential elimination of existing hazardous materials associated with the Stable building and construction with new, sustainable building materials. The cumulative impact of Alternative B in conjunction with past, present, and reasonably foreseeable future development in the vicinity of King Gillette Ranch would be adverse, moderate, long-term, and regional for wildfire, flooding, and seismic hazards. Cumulative impacts on public health and safety from exposure to hazardous materials would be negligible under Alternative B.

3.2.9 SOILS

REGULATIONS AND POLICIES

Impacts on soil are evaluated in accordance with NPS Management Policies 2006 (NPS 2006).

AFFECTED ENVIRONMENT

The Santa Monica Mountains are the southern-most mountain chain in the transverse ranges of southern California and are characterized by a complex geologic structure, igneous in the western mountains and shifting to a largely sedimentary and meta-sedimentary base in the east.

Numerous north-south canyons parallel each other. Smaller east-west trending drainages cross the slopes of these canyon lands. The combination of steep unstable slopes and sedimentary bedrock subject the Santa Monica Mountains to landslides and debris in drainages.

Map Unit	Unit Name	Description
469935	Botella Loam, 2-9% Slopes	Occurs on upland areas on small valleys and alluvial fans. Well drained; low to high runoff; moderately slow permeability, approximate composition of 41.6% sand, 37.4% silt and 21% clay
469976	Cumulic Haploxerolls 0 – 9% Slopes	Occurs along the riparian terraces and floodplains, well drained with approximate composition of no silt, sand and 10% clay.
469821	Cotharin Rock outcrop, 30 – 75 % slopes	Occurs within dry chaparral areas consisting of shallow, loamy soils characterized by rocky outcrops.

Table 6. Soil Associations Within and Adjacent to Project Planning Area

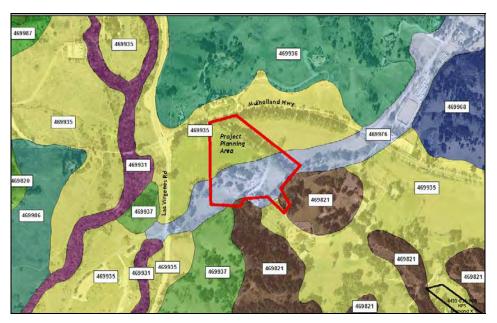


Figure 11. Soil Associations Within and Adjacent to Project Planning Area

The King Gillette Ranch site occupies a broad alluvial terrace on the middle reach of the Malibu Creek watershed. This terrace is formed at the point where Las Virgenes Canyon is joined by Liberty Canyon from the northwest and Stokes Canyon from the northeast and then widens into a small valley.

The Natural Resources Conservation Service (NRCS) prepared descriptions and maps of the soil associations present within the project area. Soil associations are landscapes exhibiting distinctive groupings of soil types. Three soil types were identified on the project planning area, most of which are classified as moderately to highly erodible. The soil types are listed in Table 6 and soil associations are shown on Figure 11.

The majority of the ranch buildings were developed on Botella Loam soils. Historical agricultural uses within SMMNRA ranged from honey production to cattle and sheep grazing. Today, a limited amount of viticulture is the remaining agricultural use. Historically, approximately 320 acres of King Gillette Ranch, including the open fields adjacent to Las Virgenes Road and Mulholland Highway, were used for agricultural activities including growing hay, grazing livestock, and fruit production. The primary area used for field crops and later converted to an apple orchard is located along Las Virgenes Road. Only remnant trees of this orchard remain today. King Gillette Ranch is no longer used for agricultural purposes. The agricultural fields are now in open space and native and non-native grasslands have become established.

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Under the No Action Alternative, no construction would occur in the project planning area. Existing operations at the project planning area would continue, including routine maintenance and repair activities, and would not be expected to change the current soil conditions of the project area. There would be less total soil disturbance under this alternative. Therefore, the No Action Alternative would have long-term, negligible, beneficial, local impacts on soil resources.

Erosive Soils. There would be little to no impacts due to maintenance and repair activities within erosive soils. Maintenance activities for the Ranch would continue to occur, such as asphalt patching to repair slumps, holes, or cracks in the road surface, replacement of damaged underground utility infrastructure, and clearing of sediment and vegetation debris at drainage culverts.

Expansive Soils. There would be little to no impacts due to construction within expansive soils. Potential for maintenance and repair of foundations, paved roadways, and underground utility lines would continue to occur as many of the existing facilities are located upon fill, topsoil, and colluvium.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on soils, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable future projects in the vicinity of the King Gillette Ranch, as summarized under cumulative impact contributors in Section 3.1.1 and in Appendix B. Past, current, and foreseeable future projects have involved or propose mass landform grading to impose development on the mountainous terrain. Soils were disturbed to the extent of adding a classification for disturbed soils into the updated soil survey for the Santa Monica Mountains (NRCS 2007). Because no actions are planned to offset the impacts of the No-Action Alternative, the cumulative impacts of the No Action Alternative would be adverse, long-term, moderate, and regional.

CONCLUSIONS

The No-Action Alternative would have beneficial, negligible, long-term, and local impacts on soil conditions and would not result in an impairment of Park resources. Because no actions are planned to

offset the impacts of the No-Action Alternative, the cumulative impacts of the No Action Alternative would be long-term, negligible, beneficial, regional impacts.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

The project area for soils is the approximately 18 acres scheduled for construction/demolition and operations associated with the Preferred Alternative. Most of the areas designated for the Visitor Center demolition and construction projects are on previously disturbed soils. These and other soils throughout the area are well-drained, although some sub-soils underlying the Botella Loam soils have higher water holding capacity with moderate to slow permeability.

Soil associations for the areas designated for the Visitor Center demolition and construction are shown on Table 6. Since these soils are well-drained, soil erosion impacts resulting from construction and demolition activities would be minimal if proper BMPs are practiced, as prescribed in Table 5, Resource Protection Measures, Soils.

Depending on future land use decisions, demolition projects, including the removal of the Print Shop, would possibly result in conversion of previously impervious surfaces to open-soil conditions. Within and adjacent to the former footprint of the Print Shop, an open-air or sheltered picnicking area may be created. Newly created open-soil areas in this area would be restored to native habitat in and around the picnicking area. There would be a minor beneficial impact on soils from removing the hardscape of the Print Shop and creating open-soil conditions.

New construction would be planned to minimize ground disturbance to retain the maximum amount of undisturbed soils and vegetative cover. With the use of conventional soil conservation and BMPs, construction-related effects to soils would be short-term, minor, adverse and local. Therefore, impacts from increased run-off on erosive soils would not be anticipated.

Some areas with open-soil conditions would be made unavailable for water infiltration and nutrient absorption functions that soils serve owing to new coverage by expanded parking lots, road widening, paths, trails, and buildings. Paths and trails would be planned and positioned to reduce short-cutting and other unplanned trails that result in vegetation trampling and soil compaction. As a result, impacts to soils under Alternative B, compared to the No-Action, would be long-term, local, and remain negligible.

Erosive Soils. Most of the demolition and construction activity under Alternative B would take place on previously disturbed soils. Impacts to soils would occur during site grading and trenching. Site grading and trenching would disturb proportionately more erosive than expansive soil types. Top layers of soils exposed during demolition and construction would be subject to erosion from wind and rain. Development areas are generally located on flat, upland areas of the site away from the majority of sensitive areas such as sloping areas nearer to Stokes Creek, where shallow loamy soils exist. The Visitor Center has been designed to avoid building within sensitive areas.

Intermittent or ephemeral gully erosion may cause soil loss downstream from construction areas. Silt fencing or other barriers to demarcate construction zone boundaries away from Stokes Creek would be

used, as prescribed in Table 5, Resource Protection Measures, General Considerations. Although surface water erosion accounts for only a minor portion of total erosion due to the short rainy season, soil loss due to localized wind disturbance throughout the year is a larger concern. BMPs to protect against production of fugitive dust are included in Table 5, Resource Protection Measures, under Air Quality.

With the proper use of conventional soil conservation BMPs and if needed, pre-design geotechnical analyses to improve grading plans, construction-related effects to soils would be adverse, minor, short-term, and local.

Expansive Soils. Construction excavation could expose small areas of underlying expansive soils. These soils are not typically found outside of drainages (see locations of the Botella Loam soil association on Figure 11). Expansive soils such as underlying clay or claystone layers could "swell" in volume when wetted and would shrink when dried. Clay properties control the degree to which the clay minerals swell. Subsurface swelling soils tend to remain at constant moisture content in their natural state and are usually relatively dry at the outset of disturbance when constructing on them. Exposure to natural or man-caused water sources during or after development results in swelling. In many instances the soils do not regain their original dryness after construction, but remain somewhat moist and expanded due to the changed environment. This volumetric expansion and contraction can cause buildings and other structures to heave, settle, and shift unevenly. However, with the prescribed resource protection measures in Table 5 that recommend further soil testing, if necessary, and adjustment of grading plans, impacts on and from expansive soils would be adverse, minor, direct, long-term, and local.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on soils, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable future projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1 and in Appendix B. The area evaluated for cumulative impacts includes all land to be disturbed within the project area and soils that are located within a 100-foot buffer from the King Gillette Ranch boundaries.

Soil resources have been historically subjected to many sources of disturbance since King Gillette Ranch was established in the 1920s and 1930s. Past ranching operations, localized wind, and agricultural vehicles have disturbed soils on King Gillette Ranch. Other sources of disturbance that have, and would continue to affect soils in the vicinity of the ranch, include site excavation, grading, and outdoor recreational use on trails and roads.

The incremental effect from future development of Alternative B on soil conditions would be negligible compared with the mass landform grading associated with other types of urban development within the surrounding area. Silt fencing, temporary sediment basins, and other NPDES soil erosion control practices would reduce the small amount of soils lost during construction.

The proposed future land use and community development would bring additional personnel, vehicles, and public education and recreation programs into the region would produce a minor effect on soil

resources. These effects would not be distinguishable from transportation and land development in the immediate area. Therefore, the cumulative impacts of the Preferred Alternative would be adverse, minor, long-term, and regional.

CONCLUSIONS

With the use of best management practices, such as applying water during dry periods or covering the soils during heavy rain events and using silt barriers to restrict the erosion of exposed soils, the effects to soil erosion would be reduced or minimized. BMP measures may include establishing limits of clearing and grading to protect and preserve riparian corridors, native grasslands, and implementing landscape plans that would stabilize soils. Implementation of geotechnical surveys, appropriate structural designs, and appropriate building and grounds maintenance may help to minimize the risk of structural damage. Table 5, Resource Protection Measures, includes conditions under General Considerations, Air Quality, Public Health and Safety, and Water Resources to avoid or reduce potential impacts from soil erosion and expansive soils.

The Preferred Alternative would have adverse, minor, long-term, local impacts on soil conditions, but would not result in an impairment of Park resources. More soil in the project planning area would be disturbed than under Alternative A, the No Action Alternative. Because resource protection measures are planned to offset the adverse impacts of the Preferred Alternative, the cumulative impacts of the Preferred Alternative would be adverse, minor, long-term, and regional.

3.2.10 TRAFFIC AND TRANSPORTATION

REGULATIONS AND POLICIES

The policies and rationale associated with the retention of traffic and transportation for evaluation as an impact topic are found in *Management Policies 2006* (NPS 2006).

AFFECTED ENVIRONMENT

REGIONAL ACCESS AND ROADWAY DESCRIPTIONS

SMMNRA is generally located west of Los Angeles between the Pacific Ocean and the San Fernando Valley. Within the boundaries of SMMNRA are numerous private residences and several public parks including King Gillette Ranch, the location of the proposed planning site. King Gillette Ranch is located at the intersection of Las Virgenes Road and Mulholland Highway. Regional access to the site is provided by the Ventura Freeway (Highway 101) and Pacific Coast Highway (PCH). Highway 101 and PCH are east-west and bracket the north and south boundaries of the Santa Monica Mountains. Highway 101 is located approximately three miles north of the project planning area, while PCH is located approximately five miles south. Immediate access to the project planning area is provided via Mulholland Highway. Las Virgenes Road follows the western property line and functions as the primary north-south corridor through Malibu Canyon between Highway 101 and the Pacific Ocean.

The following paragraphs provide a brief description of the important roadways in the project planning area vicinity.

Las Virgenes Road/Malibu Canyon Road is a north-south roadway which connects Calabasas to Malibu. Piuma Road is the dividing point for Las Virgenes Road to the north, and Malibu Canyon road to the south. Las Virgenes Road provides the major north-south travel route in the western portion of Calabasas. North of Agoura Road, Las Virgenes Road generally provides two travel lanes in each direction. South of Agoura Road, one travel lane is generally provided in each direction. Malibu Canyon Road generally provides one travel lane in each direction, although two travel lanes in each direction are provided between Civic Center Way and Pacific Coast Highway. The posted speed limits over the full length of this north-south route vary between 45 and 50 miles per hour (MPH).

Mulholland Highway is an east-west roadway extending from Calabasas to PCH at the Ventura County line (Mulholland Drive continues east from Calabasas and terminates at the Hollywood Freeway (U.S. 101)). Mulholland Highway borders the project planning area to the north. One travel lane is provided in each direction. West of Las Virgenes Road, Mulholland Highway is posted for a speed limit of 40 MPH. East of Las Virgenes Road, the posted speed limit on Mulholland Highway is 55 MPH.

Stokes Canyon Road is a north-south residential collector road that is located east of Las Virgenes Road and opposite the project planning area. Stokes Canyon Road originates at Mulholland Highway and terminates approximately two miles to the northeast. One travel lane is provided in each direction.

Pacific Coast Highway (PCH) is a state route (SR-1) that travels in an east-west direction. PCH provides two through travel lanes in each direction in the project vicinity. The posted speed limits on PCH vary between 45 MPH and 55 MPH.

REGIONAL TRAFFIC PATTERNS

Highway 101 serves as the main commuter route between the Conejo and San Fernando Valley and downtown Los Angeles. An alternate "Z" pattern commuter route using Lost Hills and Las Virgenes Roads has developed from the Highway 101 to PCH for commuters traveling to Santa Monica, West Los Angeles, and Los Angeles International Airport. This east-south-east traffic peaks during the weekday morning commute on and the west-north-west traffic peaks during the weekday afternoon commute.

On sunny summer weekends people who live along the Highway 101 corridor utilize Las Virgenes Road/Malibu Canyon Road as the quickest route to the beach. This weekend traffic peaks southbound in the early afternoon hours and northbound in the late afternoon. Mulholland Highway traffic in both directions peaks on sunny weekend afternoons when people out for a scenic drive, recreationists, motorcyclists, and local residents utilize the scenic corridor.

SITE ACCESS AND RANCH CIRCULATION

Primary vehicular access to the project planning site is provided through the main gate to King Gillette Ranch located on the south side of Mulholland Highway, east of Las Virgenes Road. A secondary, gated vehicular access to the Ranch is provided on the south side of Mulholland Highway, immediately east of Stokes Canyon Road. A third vehicular access is provided further east along Mulholland Highway; this driveway provides access to the NPS Diamond X Ranch Maintenance Facility and the MRCA Operations Center. Vehicles enter the property through the original, narrow entry gate. Immediately on the left (east side) of the entrance drive is the Gatehouse. From this point, the original entrance drive is straight and grand, following under a canopy of eucalyptus trees remaining from the 1930s. The road bisects open fields past a cut-off road to the Stable and White House, and another cut-off road to the Novitiate building, before crossing a bridge over the pond. From here the road follows a curvilinear alignment around the toe of a slope and turns south up the hill to the Gillette Mansion and automobile court on the southeast side of the Gillette Mansion.

Secondary roads at King Gillette Ranch include several access roads off of the entrance drive including an old road to the Garage and Cook's House from the automobile court, and an old road to the Stable and White House (native plant garden). Another access road constructed when the Novitiate was built in 1960 spurs off of the entrance drive, following an old service road along the pond, before crossing the pond on a concrete dike/causeway and continuing up the slope to a parking lot at the Novitiate. Access to the Dormitory is also tied to the main entrance drive on the east side of the original bridge and watercourse. This road routes traffic to a 90-car parking area. The road splits into two roads after the parking lot; one direction continues out to Mulholland Highway, and the other direction loops east up the hill providing access to tennis courts and further south, to the Dormitory. A smaller loop road between the Dormitory and the Gillette Mansion creates a campus quad between the two buildings.

CURRENT TRAFFIC CONDITIONS

As part of the environmental analysis for the upcoming King Gillette Ranch Design Concept Plan, the agencies contracted a traffic engineer to assess current traffic conditions and to determine current traffic conditions and the traffic effects of the proposed changes at the Ranch (LLG 2009). This analysis focused on seven study street segments in order to determine potential impacts. These segments are:

- I. Las Virgenes Road north of Mulholland Highway
- 2. Las Virgenes Road south of Mulholland Highway
- 3. Mulholland Highway west of Las Virgenes Road
- 4. Mulholland Highway east of Las Virgenes Road
- 5. Malibu Canyon Road north of Pacific Coast Highway
- 6. Pacific Coast Highway west of Malibu Canyon Road
- 7. Pacific Coast Highway east of Cross Creek Road

In addition to the study street segments, the following two study intersections were selected for analysis.

- I. Las Virgenes Road/Mulholland Highway
- 2. Stokes Canyon Road/Mulholland Highway

The Las Virgenes Road/Mulholland Highway intersection is signalized. The Stokes Canyon Road/Mulholland Highway intersection does not have a signal but has a stop sign facing the southbound Stokes Canyon Road approach at Mulholland.

In traffic studies, impacts to traffic are initially categorized based on their Level of Service (LOS). The LOS is a measure of the level of traffic congestion along road segments and at intersections. The LOS system uses the letters A through F, with A being best and F being worst. The following list describes the six ratings, adapted from the AASHTO "Green Book" (AASHTO 2004).

Level of Service (LOS) / Traffic Conditions

- A *Light Traffic*: Traffic flows at or above the posted speed limit, and all motorists have complete mobility between lanes.
- B *Moderate Traffic*: Traffic is slightly more congested, with some limits on maneuverability at posted speed limits.
- C Substantial Traffic: Traffic is more congested than B, where ability to pass or change lanes is not always assured.
- D *Heavy Traffic*: Traffic is at the level of service of a functional urban highway during commuting hours: speeds are somewhat reduced, motorists are hemmed in by other cars and trucks.
- E Very Heavy Traffic: Traffic route is at is a marginal service state. Flow becomes irregular and speed varies rapidly, but rarely reaches the posted limit.
- F Extremely Heavy Traffic: LOS F is the lowest measurement of efficiency for a road's performance. Flow is forced; every vehicle moves in lockstep with the vehicle in front of it, with frequent slowing required.

A highway might operate at LOS D for the AM peak hour, but have traffic consistent with LOS C some days, LOS E or F others, and come to a halt once every few weeks.

WEEKDAY PATTERNS

The following two study street segments are presently operating at LOS E during the weekday AM and PM peak hours under existing conditions:

- I. Las Virgenes Road north of Mulholland Highway
- 2. Las Virgenes Road south of Mulholland Highway

The remaining five study street segments are currently operating at LOS C or better during both the weekday AM and PM peak hours.

Both study intersections are currently operating at LOS D or better during both the weekday AM and PM peak hours.

WEEKEND PATTERNS

The following two study street segments are presently operating at LOS E during the Saturday mid-day peak hour under existing conditions:

- I. Las Virgenes Road north of Mulholland Highway
- 2. Las Virgenes Road south of Mulholland Highway

The remaining five study street segments are currently operating at LOS C or better during the Saturday mid-day peak hour.

Both study intersections are currently operating at LOS A during the Saturday Mid-day peak hour.

PUBLIC TRANSPORTATION

There is currently no public transportation to King Gillette Ranch. The City of Calabasas operates a local trolley (shuttle) route that comes within two miles of the Ranch. The nearest regional public transit line operated by the Los Angeles Metropolitan Transportation Authority (Metro) on Agoura Road and Highway 101 in Calabasas, three miles away. Another regional transit route operated by Metro runs east-west along PCH at Malibu Canyon Road, approximately five miles from the Ranch.

ENVIRONMENTAL CONSEQUENCES

The scope of the traffic study (LLG 2009) included the Visitor Center project, along with traffic associated with all other proposed actions, including day use education programs, conferences, and permitted special events. Traffic counts for the various actions were itemized, including separate traffic projections for the proposed Visitor Center. It should be noted that the conclusions in the traffic study, however, are based on the combined traffic from proposed actions in the Design Concept Plan. In other words, the conclusions in the traffic report represent a "worst case scenario" for average peak traffic to and from King Gillette Ranch, inclusive of the Visitor Center. Estimates for traffic generated by the Visitor Center, individually, are provided in the traffic study (LLG 2009), and can be used to estimate impacts associated specifically with Alternative B, the Preferred Alternative.

As summarized in the final SMMNRA GMP EIS (NPS 2002), traffic impacts are defined as the differences between future traffic conditions predicted without changing existing management and future traffic conditions predicted to result from the actions contained in the project. The impact of new traffic from the proposed Visitor Center is evaluated by comparing a baseline future traffic level, the No Action Alternative A, against the action-based future traffic level, Preferred Alternative B.

The analysis procedures described in the traffic study for the King Gillette Ranch Design Concept Plan (LLG 2009) were utilized to evaluate the future relationships and service level characteristics at each study street segment and study intersection. The traffic study provided projections for changes in Level of Service (LOS) associated with each study street segment and intersection (Table 7).

Table 7. Level of Service (LOS) Findings for King Gillette Ranch Design Concept Plan (LLG 2009)					
	Time/Day	2009 Existing LOS	2029 LOS Without Project Alternative A	2029 LOS With Project Alternative B	
Street Segments					
Las Virgenes north of	Weekday AM	E	F	F	
Mulholland Highway	Weekday PM	E	F	F	
	Saturday Midday	Е	E	E	
Las Virgenes Road south of	Weekday AM	Е	F	F	
Mulholland Highway	, Weekday PM	Е	F	F	
σ,	, Saturday Midday	Е	E	E	
Mulholland Highway west of Las	Weekday AM	В	В	В	
Virgenes Road	, Weekday PM	А	А	А	
6	, Saturday Midday	В	В	В	
Mulholland Highway east of Las	, Weekday AM	В	С	С	
Virgenes Road	, Weekday PM	В	В	С	
0	Saturday Midday	В	В	C	
Malibu Canyon Road north of	Weekday AM	В	В	В	
РСН	Weekday PM	А	А	А	
	, Saturday Midday	А	А	А	
PCH west of Malibu Canyon	Weekday AM	В	С	С	
Road	Weekday PM	В	C	C	
	Saturday Midday	С	C	C	
PCH east of Cross Creek Road	Weekday AM	C	C	C	
	Weekday PM	C	C	C	
	Saturday Midday	В	C	C	
Intersections					
Las Virgenes Road & Mulholland	Weekday AM	D	F	F	
Highway	Weekday PM	С	F	F	
č ,	Saturday Midday	A	В	С	
Stokes Canyon Road &	Weekday AM	В	В	В	
Mulholland Highway	Weekday PM	A	В	В	
	Saturday Midday	A	В	В	

Potential traffic effects from Alternatives A and B were evaluated by 1) assigning descriptions for the potential level of effect, based on terms in the final SMMNRA GMP EIS (NPS 2002), as described below; and 2) characterizing the effect by considering the setting and using the appropriate NEPA-based impact intensity threshold levels identified in Table 4 for Traffic and Transportation (negligible, minor, moderate, major).

SMMNRA GMP EIS Traffic Effect Levels (NPS 2002)

Noticeable	A change in one Level of Service
Considerable	A change in two Levels of Service
Major	A change in three or more Levels of Service

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Under the No Action Alternative, the existing visitor day use, day camps, overnight environmental education programs, public interpretive programs, and special use permit activities would continue. The vehicular access associated with Alternative A would not change from current conditions. Mulholland Highway would continue to operate as the primary access road to the Ranch. Las Virgenes Road would continue to operate as a two-lane road providing north-south access to both Highway 101 and to Pacific Coast Highway through Malibu Canyon. This corridor would continue to be used by commuters and beach enthusiasts, resulting in congestion during peak periods. As there is no change or intensification of uses proposed under this alternative, no new trip generation is forecast. Table 7 summarizes the changes in LOS between current conditions and the 20-year projection (2029) for conditions under Alternative A.

Effects on Weekday Traffic. For Alternative A, the weekday LOS drops one level for four of the seven studied street segments. The most relevant street segment, Mulholland Highway east of Las Virgenes Road, drops from LOS B to LOS C. The effect from this change in LOS would be charactized as noticeable.

For the intersections, the weekday LOS for the Las Virgenes Road/Mulholland Highway drops two levels in the AM peak (D to F), and three levels in the PM (C to F). The Stokes Canyon Road/Mulholland Highway intersection drops one LOS in the PM (A to B). Based on the SMMNRA GMP EIS traffic effect levels, the effect for the Las Virgenes Road/Mulholland Highway intersection would be considerable in the AM and major in the PM.

The projected weekday changes in traffic patterns for Alternative A range from no change to a characterization as a major effect. The traffic on the affected segments and intersections is largely contributed by the extensive "Z" commuter patterns along Las Virgenes Road. Overall, traffic impacts for Alternative A contributed by operations at King Gillette Ranch would be characterized as adverse, negligible, long-term, and local.

Effects on Weekend Traffic. The Saturday midday peak LOS for Alternative A stays the same for six of the seven street segments. PCH east of Cross Creek Road is the only street segment with a one level drop in LOS (B to C). The Saturday midday peak drops one LOS (A to B) at both study intersections. The one LOS drop may be characterized as noticeable.

Weekend traffic on Las Virgenes Road north and south of Mulholland Highway would remain at LOS E, i.e. very heavy traffic. The Las Virgenes Road/Mulholland Highway intersection and the Stokes/Mulholland intersection drop from LOS A to B, i.e. light traffic to moderate traffic. Therefore, traffic generated from the Ranch on weekends under Alternative A would create adverse, minor, long-term, and local impacts.

Effects on Public Transportation. Alternative A would generate little to no increase in demand for public transportation to King Gillette Ranch, therefore there would be no impact to public transportation from this alternative.

CUMULATIVE IMPACTS

Growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors, was assumed to be one percent (1.0%) per year through the year 2029, i.e. the ambient growth rate (LLG 2009). This ambient growth incrementally increases the traffic volumes at all of the study street segments and study intersections and accounts for traffic increases from reasonably foreseeable projects referenced in the traffic study (LLG 2009).

To evaluate cumulative impacts on traffic and transportation, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable future suburban and rural estate development projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1 and Appendix B. Several development projects proposed in Calabasas, Malibu, and unincorporated Los Angeles County in the vicinity of the proposed planning area would contribute additional traffic on this "Z" pattern, cross-mountain commuter route. Weekend beach traffic from the inland urban areas would continue to dominate traffic on Las Virgenes Road. The adverse traffic contribution from activities at King Gillette Ranch would be negligible in the cumulative impact scenario. Under Alternative A, the No Action Alternative, for both weekday and weekend traffic, cumulative impacts on the regional transportation system would be noticeable, and would result in adverse, minor, long-term, regional impacts.

CONCLUSIONS

Alternative A, the No Action Alternative, for both weekday and weekend traffic, would generate minor, adverse, long-term, local impacts and would contribute negligibly to adverse, minor, regional cumulative traffic impacts.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

Alternative B, the preferred action, would establish a full-service Visitor Center at King Gillette Ranch. It is anticipated that, under Alternative B, there would be an increase in visitor day use, curriculumbased day use education programs, and in special use permit activities associated with new and upgraded facilities for the proposed Visitor Center. Vehicle access improvements for Alternative B include widening the entry gate and entrance road to accommodate two-way traffic and establishing parking for up to 50 cars and four oversize vehicles near the proposed Visitor Center (See Section 2.2 and Figure 6).

Mulholland Highway would continue to operate as the primary access road to the Ranch. Las Virgenes Road would continue to operate as a two-lane road providing north-south access to both Highway 101 and to Pacific Coast Highway through Malibu Canyon. This corridor would continue to be used by commuters and beach enthusiasts, resulting in congestion during peak periods.

The forecasted increase in vehicle trips generated by the Visitor Center project is analyzed in this section. The cumulative impacts for Alternative B describe the effects of the increase in traffic generated by Alternative B added to the 20-year projection for traffic on seven street segments and two

intersections. Table 7 summarizes the changes in LOS between current conditions and the 20-year projection (2029) for conditions under Alternative B.

Effects on Weekday Traffic. For Alternative B, the weekday LOS is projected to drop one level for four of the seven studied street segments by the year 2029. The most relevant street segment, Mulholland Highway east of Las Virgenes Road, drops from LOS B to LOS C, for both the AM and PM peak. The effect from this change in LOS would be characterized as noticeable.

For the intersections, the weekday LOS for the Las Virgenes Road/Mulholland Highway drops two levels in the AM peak (D to F), and three levels in the PM (C to F) by the year 2029. The Stokes Canyon Road/Mulholland Highway intersection drops one LOS in the PM (A to B) by the year 2029. Based on the SMMNRA GMP EIS traffic effect levels, the effect for the Las Virgenes Road/Mulholland Highway intersection would be considerable in the AM and major in the PM.

The projected weekday changes in traffic patterns for Alternative B range from no change to a characterization as a major effect. The traffic on the affected segments and intersections is largely contributed by the extensive "Z" commuter patterns along Las Virgenes Road. Overall, traffic impacts for Alternative B contributed by operations at King Gillette Ranch would be characterized as adverse, negligible, long-term, and local.

Effects on Weekend Traffic. The Saturday midday peak LOS for Alternative B stays the same for five of the seven street segments. Both Mulholland Highway east of Las Virgenes and PCH east of Cross Creek Road street segments drop one level in LOS (B to C) by 2029. The drop in one LOS may be noticeable.

The Saturday midday peak drops one LOS (A to B) at the Stokes Canyon Road/Mulholland Highway study intersection and two LOS (A to C) at the Las Virgenes Road/Mulholland Highway study intersection. The one LOS drop may be characterized as noticeable and the LOS drop of two levels may be characterized as considerable.

Weekend traffic on Las Virgenes Road north and south of Mulholland Highway would remain at LOS E, i.e. very heavy traffic. The Las Virgenes Road/Mulholland Highway intersection drops from LOS A to C, with the change characterized as considerable, and the Stokes/Mulholland intersection drops one level from LOS A to B, i.e. light traffic to moderate traffic. Therefore, traffic generated from the Ranch on weekends under Alternative B would create adverse, minor to moderate, long-term, and local impacts.

Effects on Public Transportation. Alternative B would create additional traffic to King Gillette Ranch. This new destination might create enough public transit demand to warrant the initiation of some scheduled public transportation service to the site. As part of the full implementation of the King Gillette Ranch DCP, the agency partners could explore partnerships with local and regional transit providers to meet this possible new transit demand. Alternative B would not impact public transportation, as no actions to change public transportation to and from the Ranch are proposed as part of this project.

CUMULATIVE IMPACTS

Growth in traffic due to the combined effects of continuing development, intensification of existing developments and other factors, was assumed to be one percent (1.0%) per year through the year 2029, i.e. the ambient growth rate (LLG 2009). This ambient growth incrementally increases the traffic volumes at all of the study street segments and study intersections and accounts for traffic increases from reasonably foreseeable projects referenced in the traffic study (LLG 2009). With the potential addition of traffic from King Gillette Ranch due, in part, Visitor Center actions proposed in Alternative B, peak weekday and weekend afternoon traffic would drop one LOS (B to C) at the Las Virgenes Road/Mulholland Highway intersection and on the Mulholland Highway east of Las Virgenes Road street segment. This change would be characterized as noticeable.

To evaluate cumulative impacts on traffic and transportation, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable future suburban and rural estate development projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1 and Appendix B. Several development projects proposed in Calabasas, Malibu, and unincorporated Los Angeles County in the vicinity of the proposed planning area would contribute additional traffic on this "Z" pattern, cross-mountain commuter route. Weekend beach traffic from the inland urban areas would continue to dominate traffic on Las Virgenes Road. Under Alternative B, the Preferred Alternative, for both weekday and weekend traffic, cumulative impacts to the transportation system would be noticeable, and would result in adverse, minor, long-term, regional impacts.

It should be noted that this cumulative impact scenario includes the full program that may be proposed in the upcoming Design Concept Plan (DCP) for the entire 588-acre King Gillette Ranch. Approximately 45 percent of the weekend traffic and only eleven percent of the weekday traffic would be generated by the Visitor Center proposed in Alternative B of this EA (LLG 2009). If the full program that may be proposed in the DCP is selected and implemented, then a separate left turn lane on Mulholland Highway east of Las Virgenes Road may be warranted. This mitigation would not be necessary for Alternative B implementation.

CONCLUSIONS

Alternative B, the Preferred Alternative, when combined with continuing development, intensification of existing developments, and other reasonably foreseeable actions that may contribute to both weekday and weekend traffic, would generate minor, adverse, long-term, local impacts and would contribute negligibly to adverse, minor, regional cumulative traffic impacts.

3.2.11 UTILITIES AND SERVICE SYSTEMS

REGULATIONS AND POLICIES

The policies and rationale associated with the retention of public health and safety for evaluation as an impact topic are found in *Management Policies 2006* (NPS 2006).

AFFECTED ENVIRONMENT

Electrical service to the project planning area is provided by Southern California Edison Company (SCE). Power lines serving the project planning area are located along Las Virgenes Road, Mulholland Highway, and within the project planning area.

Natural gas service to the project planning area is provided by the Southern California Gas Company. A natural gas main located in Mulholland Highway is available to serve the project planning area, if needed.

Conveyance systems provided by Las Virgenes Municipal Water District (LVMWD) for both drinking water and recycled water are available in the project planning area. LVMWD also provides wastewater treatment for King Gillette Ranch. These systems enter/exit the Ranch on main lines that parallel the entrance road. Although the practice of spraying excess recycled water in the open fields at KGR has been discontinued, this water resource may be available for irrigation and other non-potable uses, if needed.

Los Angeles County Sanitation Districts operates the nearest landfill to King Gillette Ranch, located approximately three miles north of the Ranch. Waste Management, Inc., provides solid waste disposal services.

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Under Alternative A, KGR would continue to be served by Southern California Edison, Southern California Gas Company, and Las Virgenes Municipal Water District via existing electrical lines, gas mains and water/wastewater main lines located primarily along the roadways adjacent to KGR and the KGR entrance road. The waste stream from the Ranch would remain constant. Alternative A would not affect utilities and service systems.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on utilities and service systems, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable projects, as summarized under cumulative impact contributors in Section 3.1.1. On a regional level, new development and park-related projects would result in increased energy and water use and additional wastewater, and solid waste disposal. This increase in energy and water use from construction activities and facility operations would create additional burdens on the utility providers owing to the increase in infrastructure the utilities would be responsible for maintaining, as well as for providing the associated resource (power, water, natural gas). Alternative A, in combination with the past, present, and reasonably foreseeable actions, would result in an adverse, minor, long-term, regional impact on local utilities.

CONCLUSIONS

Alternative A would have no impact on local utilities and service systems. In the cumulative impact scenario, Alternative A would contribute negligibly to an adverse, minor, long-term, regional impact on local utilities.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

Electrical service to the project planning area would continue to be provided by Southern California Edison Company (SCE). Power lines serving the project planning area are located along Mulholland Highway, Las Virgenes Road, and within the project planning area. As part of the construction of the Visitor Center these power lines would be buried in the Visitor Center Services Area. Primary power for the visitor facilities proposed in Alternative B, would come from a 70 kW photovoltaic system that would be installed as part of the preferred project which is planned to be net-zero in terms of energy consumption. Electricity supplied by SCE would serve as the site's backup power source. Natural gas is not proposed as an energy or heat source for the visitor-serving facilities listed in Alternative B. However, if needed, natural gas service to the project planning area would continue to provided by the Southern California Gas Company via a natural gas main located in Mulholland Highway.

For potable water, the new visitor facilities proposed in Alternative B would continue to utilize water from the Las Virgenes Municipal Water District. Water-saving fixtures, landscaping, and other sustainable design elements are incorporated into Alternative B. The Visitor Center site design (Alternative B) proposes a "wetland" wastewater treatment system for sewage treatment on the site, if the system can meet federal, state, and local health and sanitation codes. Recycled water generated in this system would be used for irrigation only. If more recycled water is needed for irrigation at the site, the recycled water from Las Virgenes Municipal Water District could still be available.

Construction and demolition activities would generate a temporary, heavier than usual, stream of solid waste to be diverted to the Calabasas Landfill. Operation of the Visitor Center would also create a new solid waste source. In both construction and operational phases, the proposed project has been designed and planned to reduce solid waste, including using an existing structure for the Visitor Center and implementing NPS-wide required strategies for reducing solid waste from NPS operations. Resource protection measures in Table 5 prescribe conditions to reduce solid waste generation and disposal.

Alternative B would result in beneficial, minor, long-term, and local impacts on utility and service providers.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on utilities and service systems, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable projects, as summarized under cumulative impact contributors in Section 3.1.1. On a regional level, these new developments would result in increased energy and water use and additional wastewater. This increase in energy and water use from construction activities and new development in the City of Calabasas and County of Los

Angeles would add infrastructure and resource delivery burdens to the utility providers. Alternative B, in combination with the past, present, and reasonably foreseeable actions collectively would result in an adverse, minor, long-term, regional impact on utilities.

CONCLUSIONS

Alternative B would result in net-zero energy demand and excess energy produced, if any, would be available for other Ranch facilities or would be returned to SCE. Water use and the need for wastewater treatment would be minimized by the design of facilities at the Visitor Center. As a result, Alternative B would result in a beneficial, minor, long-term, local impact on local utilities. Alternative B would contribute a negligible beneficial impact to the overall cumulative adverse, minor, long-term, regional impact on utilities.

3.2.12 VEGETATION

The policy framework for evaluating potential impacts to native vegetation is found in Management Policies 2006 (NPS 2006), particularly in Section 4.4, Biological Resource Management; and the Los Angeles County Oak Tree Protection Ordinance (Los Angeles County Department of Regional Planning, 1981); and the California Coastal Act Chapter 3, Coastal Resources Planning and Management Policies (CPRC, 1976).

AFFECTED ENVIRONMENT

Over 900 native vascular species and more than 500 non-vascular species (lichens and bryophytes) are known to occur in the SMMNRA. The most recent classification defined 84 vegetation alliances or unique stands and 204 associations or phases (Keeler-Wolf et al. 2006). The diversity of plants and community types is typical of a Mediterranean-type ecosystem, which are among the most diverse ecosystems on the planet. Chaparral is the major vegetation type in the SMMNRA (greater than 54% of total vegetated area). The second most common vegetation type is coastal sage scrub (approximately 20% total vegetated area). Chaparral and coastal sage scrub are both important contributors to floristic diversity. Other particularly important community types are upland coast live oak woodland (3% of total vegetated area), riparian woodland (1.7% of total vegetated area), and California walnut woodland (0.2% of total vegetated area) regardless of their limited extent in the mountains. These vegetation communities are a critical resource for wildlife, play a role in geomorphic stabilization, and are associated with high biodiversity. Intermixed in openings in chaparral and coastal sage scrub as well as occurring as oak woodland understory are patches of valley grassland and non-native annual grassland (4% of total vegetated area), dominated by oat (Avena spp.) and ripgut brome (Bromus diandrus), and with isolated patches of native needle grass (Nassella spp.). Most of the larger annual grasslands in SMMNRA have a history of grazing and agricultural use. Finally, a small portion of total vegetated area is covered by salt marsh (0.3% of total vegetated area) and coastal dunes, terraces and bluffs (0.5% of total vegetated area).

In addition to the native plant community, there are more than 200 exotic plant species, 19 of which are highly invasive and targeted for removal by the park's native habitat restoration programs. The non-

native species are found generally in areas that have been previously disturbed (i.e., along roads, trails, drainages, developed areas, and in previously graded areas).

The vegetation communities within and adjacent to the 18-acre Visitor Center project planning area at King Gillette Ranch are illustrated in Figure 12. The topography of the project planning area is flat except for a small knoll southwest of the proposed Visitor Center. Immediately south of the project planning area is a narrow willow riparian corridor outlining the alignment of Stokes Creek, a seasonally flowing stream. Vegetation at the project planning area is composed of stands of coast live oak and western sycamore surrounding the building, coastal sage scrub with cacti and forbs on the knoll southwest of the buildings, non-native annual grassland, and several non-native ornamental trees including the eucalyptus allée along the entrance drive, as well as non-native ornamental ground cover around the building footprint. The plant communities within the project planning area are described below based on the *Botanical Survey of the Visitor Center Planning Area at King Gillette Ranch*, prepared by the National Park Service (NPS 2009, Sagar 2010). The entire 18-acre project planning area has been disturbed by previous and current uses, with approximately 11 acres consisting of either non-native grassland areas from previous agricultural use or ornamental landscaping.

Oak/Sycamore Woodland

Several individuals of southern coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*) and western sycamore (*Platanus racemosa*) occur at and adjacent to the project planning area around existing buildings. The coast live oaks northwest of the proposed plaza and north of the knoll are in good condition, showing normal foliage and little to no decay. The two valley oaks in the proposed plaza are in fair condition, with some damage at the root crown. These two trees are isolated from any greater contiguous valley oak woodland, but serve an aesthetic value to the future Visitor Center Services Area by providing shade and attractive landscaping value. The oak understory consists of bare ground and non-native annual grasses. One of the coast live oaks southwest of the knoll has been topped off and several large limbs overhanging an existing dirt road have been removed in the past. Two others appear healthy but have heavily overlapping canopies and both are leaning into the small cut slope they stand on as well as over the dirt road just to the north. The sycamores surrounding the Stable building are in average to good condition.

The top and northeast-facing slope of the knoll is occupied with sapling and young coast live oaks (*Quercus agrifolia*) and native shrubs known to occur in southern oak woodland understory and in moist north-facing chaparral. These shrubs include chaparral honeysuckle (*Lonicera subspicata*), California coffeeberry (*Rhamnus californica ssp. californica*), evergreen buckthorn (*Rhamnus ilicifolia*) and redberry buckthorn (*Rhamnus crocea*).

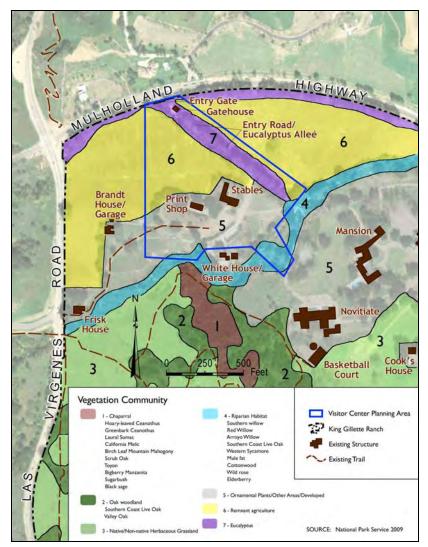


Figure 12. Vegetation Communities Within and Adjacent to Project Planning Area

Riparian Habitat

Stokes Creek is at the southern boundary of the project planning area. However, the project design provides a minimum 100-foot setback from the stream and its riparian habitat. The riparian habitat is dominated by native red willow (*Salix laevigata*). Understory species include mulefat (*Baccharis salicifolia*), mugwort (*Artemisia douglasiana*), California blackberry (*Rubus ursinus*), and native and non-native grasses and forbs. Occasional small patches of non-native invasive giant reed (*Arundo donax*) and periwinkle (*Vinca major*) are present. Vegetation is found on sandbar islands within the channel and extends to the top of the streambank.

Coastal Sage Scrub

The southwest-facing slope of the knoll southwest of the buildings is occupied by scattered coastal sage scrub species such as cacti (*Cylindropuntia* and *Opuntia* spp.), our Lord's candle (*Hesperoyucca whipplei*), deerweed (*Lotus scoparius*), and white sage (*Salvia apiana*) with a mix of native and non-native forbs and grasses in the openings. The native forbs include southern suncup (*Camissonia bistorta*), California

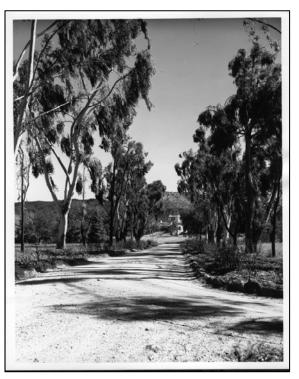
suncup (*C. californica*), Indian tobacco (*Nicotiana quadrivalvis*) and chia (*Salvia columbariae*); non-native forbs include tocalote (*Centaurea melitensis*), Mediterranean mustard (*Hirschfeldia incana*), and foxtail brome (*Bromus madritensis*).

Non-native Herbaceous Grassland

Grasslands to the northeast and northwest of the project planning area are remnant agricultural fields and are composed of several non-native annual grasses and forbs including a mix of such species as barley (*Lolium multiflorum*), ripgut brome (*Bromus diandrus*), and wild oat (*Avena barbata*). Various nonnative mustards are also found to the south of the project planning area, on the south side of Stokes Creek.

Ornamental Plants

Ornamental landscape vegetation at the project planning area includes a number of native and non-native trees, shrubs and ground cover that have been planted for landscaping purposes. The non-native trees include eucalyptus (Eucalyptus sideroxylon and E. camaldulensis) along the entrance drive (eucalyptus allée). The eucalyptus trees are mature trees in good condition. These trees are *Eucalyptus* species known to be tolerant and capable of adjusting to minor disturbance. Other non-native trees include several individuals of horse-tail she oak (Casuarina equisetifolia), eastern arborvitae (Thuja occidentalis), and privet (Ligustrum lucidum) surrounding the knoll southwest of the buildings. The native sycamores surrounding the main building and cacti and some of the shrubs on the knoll may also have been planted for landscaping purposes. Non-native invasive periwinkle (Vinca major), an ornamental groundcover, surrounds the Stable building.



King Gillette Ranch Eucalyptus Allée, c. 1940. University of Tennessee, Knoxville, Special Collections Library. Clarence Brown Collection

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Under the No Action Alternative, the area would continue to be used for public programs and Gillette Ranch maintenance-related activities. Paved and gravel areas, including areas under oak canopy, would continue to be used for parking and large equipment storage. In the absence of programs to eradicate non-native ruderal and invasive plant species at the project planning area, such plants would continue to proliferate and potentially spread off-site, thus contributing to adverse, minor, long-term, regional (Malibu Creek Watershed) impacts on native vegetation.

CUMULATIVE EFFECTS

Other recently completed and foreseeable projects could affect local soils at negligible to minor levels over the short- and long-term. The proposed action would contribute to the adverse effects of these other projects at a negligible level. The overall cumulative effect on vegetation would be localized adverse negligible impact over short-term. These *Eucalyptus* species are, however, known to be tolerant of disturbance and capable of adjusting to minor disturbance.

CONCLUSIONS

The No Action Alternative would have ongoing localized negligible to minor adverse impacts on native vegetation and negligible cumulative adverse effects on native habitat. There would be no impairment of SMMNRA native vegetation resources or values.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

Effects on Oak/Sycamore Woodlands. Construction of the Visitor Center Services Area would entail excavation for building foundations, sidewalks, and the visitor orientation plaza. Several facilities within the proposed Visitor Center Services Area would encroach from four to 12 feet into the protection zone of four oak trees: two valley oaks on the east side of the area, and two coast live oaks on the west side (See Figure 7). The oak tree protection zone is defined as five feet from the oak canopy or 15 feet from the trunk whichever distance is greater (LACDRP, 1981)). The encroachment is most extensive for the two valley oaks on the east side of the services area. Facilities include the restroom and future multi-purpose buildings and their surrounding concrete slab sidewalks, the fountain, and the surface of the orientation plaza. The surface of the proposed orientation plaza would be covered with concrete pavers or another material that would meet federal accessibility guidelines. If feasible, clean soil or other permeable material would be used between the pavers. Based on the known biology of oak trees, the most critical roots for the tree's health are the roots closest to the trunk. Oak trees have more capacity to adjust to encroachment into the finer peripheral roots within or adjacent to the canopy edge. The proposed plaza would encroach within eight feet of the westernmost valley oak's trunk, thus affecting the more vital roots of the tree. The tree assessment for the project (Appendix E) noted that both valley oaks in the plaza area are in fair condition, but exhibit some damage at the root crown. The project's proposed encroachment into the oaks' protected zone would exacerbate existing compacted soil conditions and water infiltration to the detriment of the individual trees.

The Preferred Alternative proposes to "underground" the existing electrical utility lines, i.e. to bury the existing above-ground electrical lines. New water and sewer conveyance pipelines would also be constructed across and adjacent to the eucalyptus allée and in the Visitor Center Services Area. Exact locations of the future utility lines are not available at this time. Trenching and other construction may occur within the oak tree protection zone.

The canopy edge of two valley oaks east of the eucalyptus allée is approximately 30 feet from the outer edge of the proposed drainage control swale, well beyond the five-foot setback from the canopy edge as specified for root protection in the Los Angeles County Oak Tree Protection Ordinance (LACDRP 1981). Only fine peripheral roots would be potentially impacted.

The encroachments into trees in the Visitor Center Services Area can be mitigated. Encroachment into the oak protection zone would warrant standard measures to avoid excessive root disturbance during construction. Encroachment should also be mitigated in accordance with requirements of the county's Oak Protection Ordinance. The ordinance requires a minimum 2:1 replacement ratio for impacted or removed oaks. Four trees would be encroached upon, therefore, a minimum of eight oaks should be planted as mitigation. Two restoration areas would be established in the vacant area between the proposed parking driveway and Stokes Creek and the open field southwest of the parking lot turnaround driveway for the purposes of planting oak seedlings (Figure 13, Proposed Restoration Areas). The oak restoration would enhance and extend the riparian habitat north of Stokes Creek and contribute to screening the creek habitat from Visitor Center activities.

With implementation of the proposed habitat restoration adjacent to Stokes Creek, a beneficial, moderate, long-term, localized impact would be realized in spite of encroachments into the protected zone of the four oaks.

Effects on Non-native Herbaceous Grassland. Construction of a swale in the non-native grassland field northwest of the buildings would impact only non-native grasses and forbs; no native plants would be impacted. However, construction-related soil disturbance could encourage germination of new non-native weed species from the seed bank or create opportune conditions for spread of non-native invasive plant species present adjacent to or near by the project planning area. The germination of new non-native weed species should be monitored and abatement measures taken to eradicate new occurrences. Impacts from ground disturbance within the non-native grassland would be adverse, minor, long-term, and localized.

Effects on Ornamental Plants. Widening of the entrance road and construction of a drainage swale on the northeast side of the entrance road could impact 14 mature eucalyptus trees in good condition, with diameters up to 36 inches. Impacts would be caused by construction near to or within the immediate root zone of the trees. The trees are next to the road and therefore half of the roots are already covered by pavement. If the drainage swale is constructed on the other side of the trees, their ability to uptake water and nutrients would be compromised. The impacted trees are known to be tolerant and adjust well to disturbance within the peripheral root system. Experts in arboriculture define the optimum protection zone radius, i.e. where no grading or construction activity may occur, for trees such as these eucalyptus, as 26 feet (Harris, et al. 2004). If the drainage structure is constructed closer than 26 feet to the trees, impacts would be adverse, moderate, long-term, and localized.

CUMULATIVE EFFECTS

To evaluate cumulative impacts vegetation, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable future suburban and rural estate development projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. Combined



Figure 13. Proposed Restoration Areas

past actions have had moderate, long-term localized adverse impacts on native vegetation due to an increase in the amount of impervious surface, decreased infiltration, soil compaction, vegetation removal—including oak woodlands, and concentrated human use throughout SMMNRA. Oak tree mitigation assigned to private development projects in the vicinity of the Ranch and throughout SMMNRA, along with revegetation and other restoration projects, has contributed negligible beneficial impacts that have not offset the overall adverse impacts on native habitat. Alternative B, in combination with past, present, and foreseeable projects, would have adverse, moderate, long-term, and regional (SMMNRA-wide) impacts on vegetation.

CONCLUSIONS

The Preferred Alternative would result in adverse, minor, short-term, and localized impacts on individual oak trees from construction-related activities. Beneficial, moderate, long-term, and localized impacts on native vegetation would be generated by invasive species monitoring and removal and native species restoration programs. There would be no impairment of SMMNRA vegetation resources or values from implementation of the Preferred Alternative.

3.2.13 VISITOR USE AND EXPERIENCE

REGULATIONS AND POLICIES

The regulations and policies that are associated with the retention of visitor use and experience and evaluation as an impact topic are found in the Organic Act of 1916, *Management Policies 2006* (NPS

2006), Coastal Zone Management Act, California Coastal Act (1976), and the *Malibu Land Use Plan* (LACDRP 1986).

AFFECTED ENVIRONMENT

SMMNRA - Annual visitation to SMMNRA is approximately 33 million, many of whom visit the coastal public beaches, along with visitors using the recreational trail network and participating in park interpretive programs and special events. SMMNRA features a 500-mile public trail network available for hiking, mountain biking and equestrian use. Additionally, each year more than 200,000 visitors take part in more than 1,800 interpretive programs and public events offered throughout the NRA. These programs and events are offered year-round by 25 different partner agencies and volunteer groups. Programs are listed by date in the National Park Service quarterly publication <u>OUTDOORS</u>, available at visitor contact sites and on-line.

The primary visitor center for SMMNRA is located in Thousand Oaks outside of the SMMNRA boundary and far west of the main population centers of Los Angeles. The visitor center serves an average of 25 visitors per day, due to its inconvenient location. The current visitor center does not have adequate infrastructure for park interpretive or educational programs and is not adjacent to recreational trails or a scenic setting that make visitor centers a park destination and orientation point for visitors.

King Gillette Ranch has a pre-existing informal trail network with beautiful views of the central Santa Monica Mountains and access to adjacent public parkland. Site maps of the Ranch and trail network are available for visitors at the Gatehouse and at the Dormitory. Visitor parking is clearly marked in two locations and public restrooms are available in the Dormitory. Although there are nearly five miles of official and unofficial trails traversing the property, there are no trailheads designed for the needs of visitors coming to use the trails. The most popular hike is the 1.1-mile Gillette Ranch Loop Trail that includes the Inspiration Point overlook. The trail begins east of the Novitiate and ends at the Cook's House, several minutes' walk from either parking lot. Although there are no trail signs, this trail is easy to find and hike with a site map.

In addition to hiking the trails, visitors to the Ranch enjoy the site's natural beauty and pastoral ambiance. The road system at King Gillette Ranch provides a flat paved area available to families looking for a place to ride bikes. The native plant garden and the oak trees and lawn near the pond are favorite picnic spots. Birders enjoy the diversity of avian species that can be spotted on the park grounds. Artists frequent the park to capture its beauty on their canvases.

At King Gillette Ranch, staff and agency partners provide a variety of public programs including guided bird hikes, historical walks, evening campfire programs and other family-oriented activities.

MRCA offers formal education programs for students in the Las Virgenes Unified School District and LAUSD.

With all that it has to offer, King Gillette Ranch is underutilized owing to limited visitor-oriented amenities. Not counting MRCA's formal overnight education programs and day camps which are described below, the site hosts less than 100 visitors per month.

The 18-acre project planning area is used for informal parking and as a meeting point for birdwatching programs. MRCA occasionally uses the are for permitted special events. The Stable building is vacant and closed to public access for safety reasons.

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Under the No Action Alternative, the project planning area would continue to have limited public access and inadequate visitor-serving facilities for park visitors. The Stable building would continue to be vacant and off-limits to visitors because of safety hazards. Parking would be informal and disorganized within unpaved barren areas on the southeast side of the vacant Stable building. Access to the existing public trail system within the Ranch and the adjacent Malibu Creek State Park trail system via unmaintained trail connections on the property would continue, without informative trail directional signs. The SMMNRA Visitor Center in Thousand Oaks would continue to be underutilized due to its location far from the center of the park. Few visitors to SMMNRA would use the visitor center to make the most out of their park experience. Visitors would continue to find trail and program orientation materials at scattered visitor contact stations, none of which have the combined setting, facilities, and programoriented infrastructure to provide a diversity of programs at one location. Chronic underutilization of the project planning area, and King Gillette Ranch, in general, would continue, to the disadvantage of SMMNRA visitors. SMMNRA would continue to face a public lack of awareness of the national recreation area owing to the dispersed nature of visitor programs and orientation venues. Alternative A would have a minor, adverse, long-term regional impact on visitor use and experience.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on visitor use and experience, the impacts of the Project were considered in conjunction with the impacts of past, current, and projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. On a regional level, these new developments within and on the outskirts of national recreation area would increase the demand for recreational resources. Population growth in the greater Los Angeles area would also increase demand for the park's interpretive programs and recreational trails. Proposed education program expansion in the forthcoming King Gillette Ranch Design Concept Plan (DCP) would address some visitor experience needs. The ability of the NPS and other partner agencies to meet the SMMNRA GMP's goals for visitor experience would continue to be compromised by the lack of a centralized full-service visitor center to serve the area's growing population. In combination with the past, present and reasonably foreseeable development projects, Alternative A would have adverse, moderate, long-term, regional impacts on visitor use and experience.

CONCLUSIONS

Continued operation of SMMNRA under the current model of dispersed ranger contact stations and satellite visitor centers with limited facilities and hours of operation would continue to hinder the SMMNRA visitor experience. Under Alternative A, there would be a continuing adverse, indirect, moderate, long-term impact effect on the quality of the visitor experience, and a cumulative adverse, moderate, long-term, regional impact.

IMPACTS OF ALTERNATIVE B: PREFERRED PROJECT

IMPACT ANALYSIS

Construction-related Effects on Visitor Experience. Construction of the improvements proposed under Alternative B within the project planning area has the potential to adversely affect visitor experience by adding excessive noise into the current soundscape at King Gillette Ranch, creating fugitive dust, blocking visitor ingress and egress, and degrading the visual experience with stockpiled building materials and the general appearance of a construction zone. Resource protection measures prescribed in Table 5 would limit construction hours to control noise impacts, assign Best Management Practices (BMPs) to prevent fugitive dust, and provide for safe visitor access to other parts of the Ranch during construction. Construction-related impacts on visitor experience would be adverse, minor, short-term, and local.

Operation-related Effects on Visitor Experience. Alternative B would have beneficial effects on the visitor experience in several ways. A centralized, full-service visitor center would provide the muchneeded venue for the variety of educational and interpretive programs demanded by the growing Los Angeles metropolitan population. Improved exhibits, multi-media alcove, the outdoor amphitheatre, picnic area, and the orientation plaza would provide comfortable facilities for indoor and outdoor interpretive programs. Improved vehicular circulation and parking, permanent restrooms with potable water, bike racks, and hitching posts would provide for the comfort of visitors arriving by car, bicycle, or on horseback. Recreational opportunities would be improved by constructing accessible pathways and installing good directional signs marking the connections to the greater SMMNRA trail network. Opportunities to buy food and beverages, trail maps, resource identification and education books, cards and gifts would improve visitor experience. Operation-related effects of Alternative B would have a beneficial, major, long-term, regional impact on visitor experience in SMMNRA.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on visitor use and experience, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. On a regional level, these new developments within and on the outskirts of national recreation area would increase the demand for recreational resources. Population growth in the greater Los Angeles area would also increase demand for the park's interpretive programs and recreational trails. The ability of the NPS and other partner agencies to meet the SMMNRA GMP's goals for visitor experience would be greatly improved with construction and operation of the Visitor Center proposed by Alternative B, particularly in conjunction with possible expanded education programs that would be explored in the forthcoming King Gillette

Ranch DCP. The centralized full-service Visitor Center would serve the area's growing population efficiently for the first time in the 31-year history of SMMNRA. Overall, Alternative B would have a major beneficial, long-term, regional impact on visitor experience in SMMNRA in terms of cumulative impacts.

CONCLUSIONS

Alternative B would have short-term, minor adverse impacts on visitor experience during the construction phase, typical of construction zone activities. Resource protection measures are designed to keep impacts at the minor level. Alternative B in the operational phase would have major, long-term beneficial visitor experience impacts owing to improved public access to a conveniently located, full-service visitor center.

3.2.14 WATER RESOURCES

REGULATIONS AND POLICIES

The regulations and policies associated with the retention of water resources for evaluation as an impact topic are found in the Clean Water Act, Executive Order 12088, Executive Order 11990 (Wetlands), Executive Order 12088 (Federal Compliance with Pollution Control Standards), and *Management Policies 2006* (NPS 2006), Coastal Zone Management Act, California Coastal Act, and Malibu Land Use Plan (LACDRP 1986).

AFFECTED ENVIRONMENT

Santa Monica Mountains National Recreation Area features an extensive stream network that drain from several watersheds into Santa Monica Bay and the Pacific Ocean. Most of the streambeds are dry most of the year, reflecting the low-rainfall conditions of the Mediterranean-type ecosystem. A few streams flow year-round. Water quality varies among the streams depending on how developed or undeveloped the watershed is. In the Santa Monica Mountains, a few streams such as Arroyo Sequit, Cold Creek, and Solstice Creek remain in relatively natural states, and their conditions are considered good or excellent. Many other streams can only be considered fair or poor, due to water quality degradation from pollution, invasions of non-native species, and disruptions to natural stream flows (SMBRC 2010). Nonpoint-source pollutants, including nutrients, oil and grease, coliform bacteria, are contributed by rural and suburban development within and adjacent to the national recreation area. Sedimentation remains the single largest non-point source pollutant in streams of the Santa Monica Mountains. Sediment contributors include erosion from natural landforms, as well as from unpaved roads, trails, and graded areas throughout the national recreation area.

King Gillette Ranch is located in the Malibu Creek Watershed, the second largest sub-watershed within the Santa Monica Bay Watershed totaling approximately 109 square miles. King Gillette Ranch is situated in the southern portion of the watershed, upstream of the confluence of Stokes Creek and Malibu Creek. Malibu Creek ultimately drains into Malibu Lagoon before it reaches the Pacific Ocean. Malibu Creek is listed on the State Water Resources Control Board's Clean Water Act (CWA) Section 303(d) list of "Water Quality Limited Segments." The associated pollutant/stressors are fish barriers (Rindge Dam), high coliform count, nutrients, scum, and sedimentation.

The major on-site watercourse is Stokes Creek, an intermittent stream that drains a 3,055-acre subwatershed within Malibu Creek Watershed. The creek crosses the northwestern portion of the property in a northeasterly to southwesterly direction and passes approximately 100 feet south of the project planning area.

Stokes Creek is included in the National Wetland Inventory managed by the U.S. Fish and Wildlife Service. The creek is described as a "freshwater forested/shrub wetland," consistent with the identified willow riparian habitat that lines the creek (See Section 3.2.12, Vegetation). Water quality, as documented by Heal the Bay's Stream Team (Heal the Bay, 2003), is typical of streams impacted by development in the watershed: the stream has elevated nutrient and coliform pollutant levels. Land use upstream from the Ranch is primarily residential and includes equestrian estates.

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Effects on Water Quality. Water quality concerns associated with continued operation of the Ranch facilities are related to continued use of the maintenance facility, automobile or maintenance-related pollutants, and potential soil erosion associated with slope instability resulting in a continuing local, long-term, minor, adverse impact. Stormwater flows from parking and maintenance areas would continue to sheet-flow into Stokes Creek. Although stormwater runoff from the Ranch parking areas would continue to be a potential water quality concern, the limited number of vehicles that utilize this facility and lack of impervious surfaces overall minimize potential water quality impacts to Stokes Canyon Creek. A low level of sediment from the unpaved parking areas would continue to erode slowly into the creek, mainly during heavy rainfall events. Water quality of Stokes Creek is already at slightly degraded levels (Heal the Bay, 2003) owing to current developed land uses in the watershed. Thus, a continuation of existing conditions at the Ranch would have a negligible, adverse, long-term impact on water quality of Stokes Creek. The minimal addition of sediments into Stokes Creek would have adverse, negligible, long-term, local impacts on water quality.

Effects on Wetlands. The primary use of wetland habitat along Stokes Creek immediately south of the project planning area is bird habitat. The current maintenance and operations at the Print Shop are at least 325 feet from Stokes Creek, and the Stable building is vacant and unused. Therefore, structures or land use in the project planning area does not affect the wetland habitat. There would be no impact to the size, function and value of the riparian wetland along Stokes Creek resulting from Alternative A.

Effects of Flooding. Stormwater discharge from the Ranch would not change, as no new impervious surfaces are planned that would contribute to increased runoff and downstream flooding. There would be no change in the ability of Stokes Creek to convey floodwaters. Therefore, continued operation of the Ranch facilities would have no impact on downstream flooding.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on water resources, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable future suburban and rural estate development projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1, all of which would add substantial impervious surface to the Malibu Creek Watershed. All development would be subject to National Pollutant Discharge Elimination System (NPDES) permits that require keeping water and non-point source pollution on-site, thus reducing the potential for increased non-point source pollution into the Malibu Creek drainage and ostensibly, for downstream increases in flooding. Alternative A, in combination with the past, present, and reasonably foreseeable future actions would collectively result in an adverse, minor, long-term, regional impact on water resources.

CONCLUSIONS

Alternative A would result in minor, adverse, regional impacts on water resources owing to ongoing low level contribution of non-point source sediments into the already degraded waters of Stokes Creek and Malibu Creek, continued conditions that have no impact on the wetland habitat along Stokes Creek, and continued conditions associated with the effects of flooding at the Ranch. There would be no impairment of park values associated with water resources.

IMPACTS OF ALTERNATIVE B: THE PREFERRED ALTERNATIVE

IMPACT ANALYSIS

Effects on Water Quality. Construction-related impacts, including grading for the proposed Visitor Center Services restroom and storage building, parking lot and entrance road widening, and for the stormwater conveyance system have the potential to increase non-point source pollution into Stokes Creek from soil disturbance and construction equipment and practices. Grading would be minor and balanced on-site. Resource protection measures to protect water quality (Table 5) include preparing a Stormwater Pollution Protection Plan (SWPPP) to meet federal requirements for reducing impacts to water quality, and implementing water quality-protective Best Management Practices (BMPs) for construction sites.

Operation-related impacts involve consideration of the proposed stormwater system for the parking lot and Visitor Center Services Area and the stormwater system for conveying sheetflow from fields north and east of the Stable building away from the structure. The environmental sustainability-oriented systems calls for installation of bioswales or vegetative filters adjacent to proposed parking areas and in the fields north of the Stable and east of the entrance road. A percolation tank would be constructed adjacent to the Visitor Center Services Area. The systems would direct sheetflow from the grassy fields and the parking lot area away from Stokes Creek and into a filtration system. Thus, the typical nonpoint source pollutants from parking lots (oil and grease) would not enter Stokes Creek. By directing sheetflow to these improvements, there would be reduced velocity and increased water filtration, thus removing suspended solids and pollutants for enhanced water quality and facilitation of groundwater recharge. The stormwater systems would be designed to avoid erosion at stormwater discharge locations. With implementation of the sustainability-oriented stormwater systems and the proposed resource protection measures in Table 5, impacts on water quality under Alternative B would be beneficial, minor, long-term, and local compared to Alternative A.

Effects on Wetlands. The primary use of wetland habitat along Stokes Creek immediately south of the project planning area is for bird habitat. The Visitor Center Services Area and the parking lot have been designed to adhere to a 100-foot setback from the top of the streambank, as typically required by the Coastal Commission. The proposed geothermal loop cooling and heating system would create short-term impacts to the Stokes Creek streambanks during construction to install the system's piping. Potential runoff of sediments during construction would be minimized by the implementation of best management practices and mitigation measures, as prescribed in the protection/enhancement measures (Table 5). These construction-related impacts would be adverse, negligible, short-term, and local. During Visitor Center operation, the circulating water in the geothermal system would be self-contained on-site within the system's piping, and would have no association with water flowing in Stokes Creek.

To mitigate the short-term and long-term impacts on riparian wetland habitat along Stokes Creek, the resource protection measures prescribed in Table 5 include restoration of approximately two acres of degraded habitat adjacent to Stokes Creek. The restoration would widen the riparian corridor, thus enhancing the quality of riparian wetland habitat along Stokes Creek. With implementation of the 100-foot setback and the recommended resource protection measures for water quality protection and habitat restoration (Table 5), beneficial, minor, long-term, local impacts on the size, function, and value of the riparian wetland along Stokes Creek would result from Alternative B.

Effects of Flooding. Construction of new facilities in the Visitor Center Services Area and the adjacent parking lot would create a net gain of one acre of impervious surface within the project planning area. Runoff from the Visitor Center Services Area and parking lot would be captured by the proposed stormwater drainage system designed to channel water into landscaped infiltration areas. There would be no change in the ability of Stokes Creek to convey floodwaters. Therefore, Alternative B would have no impact on downstream flooding.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on water resources, the impacts of the Project were considered in conjunction with the impacts of past, current, and foreseeable future suburban and rural estate development projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. Past development has led to the current poor water quality condition of Malibu Creek (CSWQCB 2010) and to increased intensity of flooding. New development represents a small proportion of the already-developed area, although all new projects would add impervious surface to the Malibu Creek Watershed. New impervious surface in the watershed would be added by the proposed project from parking lot construction and the proposed new buildings and visitor orientation plaza. However, the added surface would be a negligible proportion compared to all existing and proposed development in the watershed. All future development would be subject to National Pollutant Discharge Elimination System (NPDES) permits that require keeping water and non-point source pollution on-site, thus reducing the potential for increased non-point source pollution into the Malibu Creek drainage and ostensibly, for reducing potential increases in downstream flooding

intensities. Past, present, and reasonably foreseeable future actions in conjunction with Alternative B would collectively result in an adverse, minor, long-term, regional impact on water resources.

CONCLUSIONS

Alternative B would result in beneficial, minor, long-term, local impacts on water resources associated with Stokes Creek and Malibu Creek owing to improved stormwater treatment systems for sheetflow runoff from the proposed project, and from restoration of native habitat adjacent to the riparian wetland habitat along Stokes Creek. Alternative B would have a cumulative adverse, minor, long-term, regional impact on water resources. There would be no impairment of park values associated with water resources.

3.2.15 WILDLIFE, AND THREATENED, ENDANGERED, AND OTHER SENSITIVE SPECIES

REGULATIONS AND POLICIES

The policy framework for evaluating potential impacts to native wildlife is found in Management Policies 2006 (NPS 2006), particularly in Section 4.4, Biological Resource Management. Other applicable laws include the federal Endangered Species Act of 1973 and the California Endangered Species Act.

AFFECTED ENVIRONMENT

WILDLIFE

Santa Monica Mountains National Recreation Area. Santa Monica Mountains National Recreation Area is home to numerous wildlife species. The climate in southern California is typical of a Mediterranean ecosystem, with hot, dry summers and cool, wet winters. The topographical variety of the Santa Monica Mountains creates many habitat types, ranging from hot, dry, upland habitat to riparian forests along waterways in shady canyons. There is a relatively small amount of natural, year-round standing water in the park (ponds and lakes), although there are a few vernal pools and a number of human-made ponds and lakes. The combination of the climate and topography lends itself to providing habitat in which many wildlife species can thrive.

Given that the park lies immediately adjacent to the Los Angeles basin and within the Los Angeles metropolitan area, the second largest in the country, the primary threat to wildlife populations in the park are from the effects of habitat loss and fragmentation. These threats are particularly significant for wide-ranging species, such as mammalian carnivores, or more habitat-specific animals. Other threats to wildlife in the park include wildfires, which can cause direct mortality and destroy or alter important habitat areas, introduction of toxicants into the environment, such as water pollutants or rodenticide poisons, changes in hydrology from urban development, and the introduction of invasive exotic species such as crayfish (*Procambarus clarkii*). Many of these threats can also be exacerbated by habitat fragmentation, for instance wildfires are more likely near roads or developed areas, and in fragmented areas entire habitat patches may be affected by fire.

Important mammal species include carnivores, from mountain lions (*Puma concolor*), coyotes (*Canis latrans*), and bobcats (*Lynx rufus*), to rarer species such as ringtails (*Bassariscus astutus*), long-tailed weasels (*Mustela longicauda*), and badgers (*Taxidea taxus*). Widespread herbivores include mule deer (*Odocoileus hemionus*)—the largest herbivore, cottontail (*Sylvilagus auduboni*) and brush rabbits (*Sylvilagus bacchmani*), and a range of small mammal species from ground squirrels (*Spermophilus beecheyi*), woodrats (*Neotoma* spp.), and pocket gophers (*Thomomys bottae*), to voles (*Microtus californicus*), harvest mice (*Reithrodontomys megalotis*), and a number of other mice species (*Peromyscus* spp). Eleven species of bats have been documented to occur in the national recreation area.

The area's reptiles and amphibians (herpetofauna), particularly the terrestrial species, are very diverse. Inventory and monitoring efforts in the park have documented twelve snake species, including a number of relatively rare or sensitive species such as mountain king snakes (*Lampropeltis zonata*), night snakes (*Hypsiglena torquata*), and blind snakes (*Leptotyphlops humilis*); seven lizard species, including the sensitive coast horned lizard (*Phyrosoma coronatum*); and five largely terrestrial amphibians.

Bird diversity in the park and surrounding region is also high for both resident and migratory species, with about 400 species recorded within the SMMNRA boundary. Bird species include some rare or declining species such as cactus wrens and willow flycatchers, and large populations of several raptors. The SMMNRA 2002 GMP includes a comprehensive list of threatened or endangered bird species as well as park, state, and federal species of concern (NPS 2002).

Less detailed information is available on the diversity and abundance of terrestrial invertebrate species (insects and spiders, etc.) in the park, although more inventories have been conducted recently.

There is an extensive ephemeral and perennial stream network throughout the Santa Monica Mountains that supports a rich aquatic invertebrate fauna. Significant populations of several aquatic amphibian species are present, including Pacific (*Pseudacris regillla*) and California treefrogs (*Pseudacris cadaverina*), and California newts (*Taricha torosa*). The Santa Monica Mountains are also home to the federally listed endangered southern steelhead trout (*Oncoryhynchus mykiss*) and the tidewater goby (*Eucyclogobius newberryi*).

King Gillette Ranch. King Gillette Ranch is a 588-acre park site in the center of the Santa Monica Mountains and includes a number of typical vegetation communities (see Vegetation, Section 3.2.12), along with many of the wildlife species that frequently inhabit those communities. The Ranch supports both common and uncommon wildlife species found in SMMNRA.

The Visitor Center project planning area includes 18 acres in the developed part of King Gillette Ranch. The project planning area includes the eucalyptus allée entrance road and the Stable building and vicinity. Stokes Creek runs along the southern boundary of the project area. Wildlife diversity within the Visitor Center project planning area is limited owing to domination of the site by non-native grasslands and barren areas, and because the native trees are next to structures and developed areas and are separated from the larger woodlands in the vicinity.

Stokes Creek, located approximately 100 feet south of the Visitor Center development footprint, is included in the National Wetland Inventory (USFWS, 2009) as a "freshwater forested/shrub wetland."

The willow riparian habitat along the creek provides good, sheltered habitat for birds. The project planning area also features "edge" habitat, i.e. habitat that overlaps at least two kinds of plant communities. The edge habitat in the project planning area includes the native oak and sycamore trees in the vicinity of the Stable building that are adjacent to the non-native grassland areas. The combination of the creek and edge habitat at the Ranch create one of the best locations in SMMNRA for birdwatching. Bird counts over the past 17 years at adjacent Malibu Creek State Park have inventoried 180 species; 85 of the species sighted at Malibu Creek State Park have been sighted at King Gillette Ranch (Appendix E, Gillooly, 2010; SFVAS 2007).

Stokes Creek also provides riparian habitat potentially for several amphibian species that, while not detected during the most recent National Park Service surveys (April, 2009), are potentially or likely present at the site. The creek is a tributary of Malibu Creek. Stokes Creek was completely dry in late April, so it is likely wet only briefly in most years. Therefore, Pacific treefrogs (*Pseudacris regilla*) would likely breed in the stream in years when water is present for a sufficient period. Toads could potentially breed in some years in certain areas within the Ranch area, although they were not observed. In addition, there are terrestrial salamander species that are likely present in the oak woodlands in the area, specifically black-bellied salamanders (*Batrachoseps nigriventris*), and potentially ensatina salamanders (*Ensatina eschoscholtzii*), and arboreal salamanders (*Aneides lugubris*). Although these species were not detected during the April 2009 surveys, they would more likely be detected in the winter or early spring, especially after a rain event. Commonly found bats in SMMNRA, including Mexican free-tailed bats, western pipistrelle, and Yuma myotis, would likely be present foraging on insects in the project planning area.

Other animals likely to reside within the 18-acre project planning area, based on surveys of the entire King Gillette Ranch, include western fence and side-blotched lizards, California ground squirrels, eastern fox squirrel (an introduced species), Valley pocket gophers, desert cottontails, and mule deer, acorn woodpecker and red-tailed hawks. For a complete list of all the species detected during the surveys of the ranch, please consult Appendix E.

Coyotes, bobcats, and gray foxes' use of the Ranch has been detected, via identification of scats. All of these larger carnivores, as well as mountain lions, likely move through the overall Ranch. National Park Service has documented that the Ranch is within the home range of several radio-collared mountain lions. The 18-acre project area itself is not important for carnivore movement because of the lack of cover, although animals may move along Stokes Creek to the southeast when moving across the Ranch.

THREATENED, ENDANGERED, OR OTHER SENSITIVE SPECIES OF CONCERN

The species evaluated as threatened, endangered, or other species of concern, include the species with potential to occur, or those that have historically occurred, in Santa Monica Mountains National Recreation Area and with a special conservation status that includes at least one of the following:

• Species listed under the Endangered Species Act of 1973 as endangered, threatened, proposed for listing, or a species of concern (http://www.fws.gov/endangered/wildlife.html);

- Species listed by the California Department of Fish and Game as endangered, threatened, state candidate for listing, and species of concern
 (http://www.dfg.ca.gov/wildlife/nongame/t_e_spp/index.html); and
- Rare plant species monitored by the California Native Plant Society (CNPS), under the auspices of the California Department of Fish and Game, including plants on CNPS Lists 1B, 2, 3, and 4. (http://www.dnr.wa.gov/nhp/refdesk/plants.html).
- Park species of concern for SMMNRA, as listed by NPS biologists on the Division of Planning, Science and Resource Management's Sensitive Plant and Animal Lists.

Collectively, the species included in the status categories above are referred to as "listed or otherwise sensitive species" throughout this EA.

Santa Monica Mountains National Recreation Area. The Santa Monica Mountains are home to 169 listed or otherwise sensitive species. There are 33 federal and/or state-listed threatened and endangered species, including plants, animals, birds, and insects. An additional 40 species are federal or state-listed species of concern. There are also 61 plants and 35 animals that are not listed or species of concern, but are recognized by NPS biologists as park sensitive species of concern owing to varying circumstances, including presence on other critical, but unformalized sensitive species lists, and unexpected presence in the mountains.

King Gillette Ranch. The Ranch hosts a diversity of habitat communities that may be used by several of the listed or otherwise sensitive species. The 18-acre Visitor Center project planning area consists of mostly degraded habitat, although the adjacent Stokes Creek riparian corridor provides good habitat for several listed or otherwise sensitive species.

The project planning area is within Malibu Creek Watershed, which has been designated by U.S. Fish and Wildlife Service as critical habitat for two federally listed endangered species: the southern steelhead trout (Oncoryhynchus mykiss) and the tidewater goby (Eucyclogobius newberryi). Stokes Creek drains into Las Virgenes Creek, which drains into Malibu Creek. Thus, Stokes Creek at the proposed planning area is interconnected with the drainage system that supports the two listed species. The two species inhabit lower portions of Malibu Creek, with the goby mostly found in Malibu Lagoon where there is saltwater influence. Steelhead trout inhabit the creek up to Rindge Dam, located approximately four miles downstream from the project planning area. The dam creates a formidable barrier to steelhead access to the upper reaches of the watershed; the species cannot surmount it. Additionally, there is no suitable habitat for the steelhead trout within Stokes Creek, not only because of Rindge Dam, but also because Stokes Creek is too ephemeral to consistently provide appropriate spawning and rearing habitat (NPS 2009). While Stokes Creek at the project planning area is not suitable habitat for direct steelhead trout presence, water quality in Stokes Creek contributes indirectly to the downstream water quality of Malibu Creek in the lower reaches of the watershed. As noted in Section 3.2.14, Water Resources, water quality, as documented by Heal the Bay's Stream Team (Heal the Bay, 2003), is typical of streams impacted by development in the watershed: the stream has elevated nutrient and coliform pollutant levels.

No listed, and just one otherwise sensitive plant species, including those listed in Arnold (1991) as potentially occurring at the project planning area, were observed by NPS during the 2009 and 2010 field surveys. Indian tobacco (*Nicotiana quadrivalvis*), a species on the California Native Plant Society's "Watch List" and listed in Biological Resources Inventory supplemental report (Envicom Corporation, 1991), is known to occur on the knoll southwest of the buildings. It is an aromatic glandular annual forb and was last observed in May, 2007. As an annual forb, it may not germinate during dry years with unsuitable environmental conditions, but it is likely to persist in the seed bank.

No listed or otherwise sensitive animal species were observed during biological surveys performed by NPS staff in April, 2009, for the full Ranch, and again in January, 2010, specifically for the project planning area (Appendix E). Appendix E also lists species with status that may occur within SMMNRA and their respective federal, state, and/or park status (see the key at the end of the table). Also, because no listed or otherwise sensitive species were observed during the project-oriented surveys, Appendix E lists whether the species may be present in the project area and just not observed at the time of the survey. The following bullets summarize the animal species that have the potential to be present. Appendix E may be referred to for species names and their status.

- On listed bird species, the southwestern willow flycatcher (*Empidonax traillii extimus*), have the
 potential to be present. Twenty-four otherwise sensitive bird species have either been observed
 during park birdwatching programs within or adjacent to the project planning area, or have the
 potential to be present based on bird sighting inventories for similar habitat at adjacent Malibu
 Creek State Park (Gillooly 2010; SFVAS 2007). Information on breeding pair or other bird
 behavior indicating more than transitory presence by the bird species is not available.
- One federal and state species of concern bat species, the pallid bat (*Antrozous pallidus*) and one bat park species of concern have the potential to be present.
- Four reptile species of federal and/or state concern, two reptiles species of park concern, and two amphibian species of park concern have the potential to be present within the project planning area.

Casual occurrence of a listed species, such as the presence of a transient bird species, would not necessarily trigger a potential effect by the proposed project on the species. There is limited suitability of the habitat within the project planning area, and the adjacent Malibu Creek State Park offers similar, less disturbed, habitat adjacent to the project planning area. However, the willow riparian habitat along Stokes Creek, located at least 100 feet south of the project's development footprint, provides good, sheltered habitat for birds, insect breeding habitat for bat foraging, and suitable habitat for reptile migration and for amphibian breeding during the rainy season.

ENVIRONMENTAL CONSEQUENCES

IMPACTS OF ALTERNATIVE A: NO ACTION

IMPACT ANALYSIS

Under Alternative A, the Ranch area would continue to support park maintenance and limited office operations, public programs including outdoor recreation, and ranger activities such as the birdwatching walks that meet in the project planning area and view birds around Stokes Creek and in the nearby oak trees and grassland fields. Noise from park visitors, artificial lighting from permitted park special uses, and routine maintenance and use of the facilities on the property would continue as an existing condition. There are currently no uses within the project planning area that contribute either nutrients or coliform non-point source pollutants into Stokes Creek. The project planning area is mostly unpaved, with stormwater either infiltrating into the ground, or flowing across the ground toward Stokes Creek. Downstream water quality would not change from the current status of critical habitat water quality conditions in Malibu Creek Watershed for the two listed fish species. Stokes Creek would continue to be ephemeral and not have suitable habitat for steelhead trout needs; no essential fish habitat would be affected. The project planning area would continue to support common wildlife species, such as California ground squirrel and Valley pocket gopher that are tolerant of humans. Wildlife, such as mule deer, desert cottontail, and common birds such as the acorn woodpecker, American crow, north rough-winged swallow, and rufous hummingbird would continue to use the grassland areas. No activities are proposed for the knoll that may affect the potential Indian tobacco seed bank on the knoll.

Wildlife. Alternative A would have a continuing adverse, negligible to minor, long-term, and local impact on wildlife within or adjacent to the project planning area owing to the current degraded quality of habitat and the ongoing Ranch operations and programs.

Threatened and Endangered or Other Sensitive Species. Alternative A is not likely to affect threatened, endangered, or otherwise sensitive species that may be present within or adjacent to the project planning area.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on wildlife and listed or otherwise sensitive species, the impacts of the project were considered in conjunction with the impacts of past, current, and foreseeable future suburban and rural estate development projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. The projects are mostly north of King Gillette Ranch, and several are within existing developed areas. Some projects may have the potential to constrict, but not completely block, wildlife movement corridors. New development would add impervious surface area into Malibu Creek Watershed, thus increasing storm water runoff. However, NPDES permits require on-site retention of runoff and filtration to reduce the addition of non-point source pollutants into the stream network. Of more concern for cumulative impacts are proposals for estate compounds within as yet large undeveloped large expanses of private open space within Malibu Creek Watershed and adjacent areas. The proposed residences require new, long entrance roads, mile-long extensions of municipal water lines, and would introduce night lighting, and human sounds and smells into as yet undisturbed

high quality habitat. Such projects would reduce available habitat for large carnivores and other wildlife, including SMMNRA park species of concern species, but would not be likely to adversely affect any listed species.

Overall, the past, present, and reasonably foreseeable future actions in combination with Alternative A would have an adverse, minor, short- and long-term, regional impact on wildlife, and is not likely to adversely affect threatened, endangered or otherwise sensitive species. Alternative A would contribute negligibly to the cumulative impact.

CONCLUSIONS

Wildlife. Alternative A would have a continuing local, long-term, negligible to minor, adverse impact on wildlife within or adjacent to the project planning area owing to the current degraded quality of habitat and the ongoing Ranch operations and programs. Alternative A would have a cumulative, adverse, minor, short- and long-term, regional impact. There would be no impairment of SMMNRA wildlife resources or values.

Threatened and Endangered or Other Sensitive Species. Alternative A by itself or under the cumulative project scenario is not likely to adversely affect threatened, endangered, or otherwise sensitive species that may be present within or adjacent to the project planning area.

IMPACTS OF ALTERNATIVE B: PREFERRED ALTERNATIVE

IMPACT ANALYSIS

Alternative B proposes construction activities at and adjacent to the Stable building and the Print Shop, including the area south of the structures and north Stokes Creek. Construction activities would occur at least 100 feet away from Stokes Creek, with the exception of the geo-thermal loop system that crosses the creek, and the stormwater conveyance structure that terminates near the creek southwest of the parking area. Construction activities would include excavation, jack-hammering, use of power tools, heavy equipment operation, and movement of dumptrucks or other trucks hauling building materials.

Ambient noise levels would increase substantially during project construction, demolition, and grading. Wildlife would be exposed to noise levels and human disturbance greater than existing ambient levels (i.e., greater than about 50 A-weighted decibels). Noise and human disturbance during construction activities within this period would be continuous and greater than noise generated by normal activities at both areas.

Construction-related Impacts on Wildlife. Generalist mammals such as mule deer, coyotes, ground squirrels, and pocket gophers utilize the project area, and a few individuals may be displaced or may slightly alter their movements during construction, but these effects would be minor to negligible. Likewise, terrestrial lizards such as fence or side-blotched lizards likely utilize the areas around and under the oak trees, and they may be temporarily displaced during construction, but they should quickly recolonize the area. None of these species are rare or sensitive. Terrestrial salamander species such as

black-bellied salamanders may be present under or near the oak trees. Since the oak trees, including the drip-line area of most trees, would not be modified, terrestrial salamanders should remain unaffected.

A number of bird species, for instance acorn woodpeckers, or raptors such as red-tailed or redshouldered hawks, may be utilizing the oak trees to perch or nest. The birds may temporarily avoid the area during construction, but since the oak trees would be maintained, birds would likely return to using them after construction. Similarly, birds using the "edge" habitat (the interface between trees and fields) for foraging, roosting, and nesting may be disturbed during construction activities in the Visitor Center Services Area, in the adjacent fields, and along the entrance road. Resource protection measures have been proposed to avoid harm to birds covered under the federal Migratory Bird Treaty Act during construction (Table 5).

Construction-related impacts on wildlife from Alternative B would be adverse, minor, short-term, and local with implementation of the recommended resource protection measures in Table 5.

Construction-related Impacts on Threatened and Endangered or Other Sensitive Species.

Construction-related impacts would be the same as for wildlife, in general. Listed or otherwise sensitive birds, bats, reptiles, and amphibians may be temporarily displaced by construction activities, and may move to adjacent habitat in Malibu Creek State Park. Table 5 includes resource protection measures to protect water quality, including fencing off sensitive resource areas, including the 100-foot creek setback and developing and implementing an SWPPP for construction that incorporates BMPs, thus protecting water quality in project planning area within Malibu Creek Watershed.

Construction-related impacts on wildlife from Alternative B are not likely to adversely affect threatened, endangered, or otherwise sensitive species that may be present within or adjacent to the project planning area. with implementation of the recommended resource protection measures in Table 5.

Operation-related Impacts on Wildlife. The operational phase of the Visitor Center would generate a regular, ongoing increased level of human presence in the project planning area compared to Alternative A, No Action, owing to use of the Visitor Center and associated public programs and permitted special events.

Bird species expected to be present in the trees surrounding the Visitor Center Services Area and within the Stokes Creek riparian habitat frequently inhabit, and even nest in, areas with extensive human activity. Thus, while some birds may move to other habitat with less human presence, other birds may choose to use the habitat in the project planning area after Visitor Center operation commences.

Post-construction ambient noise levels would return to a more natural soundscape (NPS 2006). Park programs and permitted special events would be limited in both frequency of activities and the use of amplified sound systems to a level protective of the roosting, foraging, and breeding activities of wildlife within and adjacent to the project planning area. Table 5 contains resource protection measures to avoid or reduce sound-related impacts.

Nighttime lighting for wayfinding, security, and permitted special events would be a new humangenerated potential impact on wildlife. Extensive artificial lighting in natural areas can adversely affect wildlife in a number of ways, including altering movement and activity patterns, reducing the effectiveness of certain behaviors (e.g. hunting by owls), and altering perception (e.g. damaging vision). Extensive use of night lights during the operation of the Visitor Center could adversely affect the behavior of some common wildlife species such as bats, barn owls (*Tyto alba*), nesting or roosting birds, or amphibians breeding in the creek. Since Visitor Center operation would also largely occur during daylight hours, these effects should be negligible. Efforts should be made to avoid unusual and extensive use of night lighting for special events in the project area, and whatever night lights exist around the Visitor Center or parking lot should be shaded as much as possible. To this end, resource protection measures have been proposed to reduce night lighting associated with operation of the Visitor Center, including facilities lighting and lighting for programs and permitted special events (Table 5).

Stokes Creek, just to the south and southeast of the project area, may have breeding amphibians, specifically Pacific treefrogs or western toads during the winter and spring. However, this creek is ephemeral, so in many years it may not support amphibian breeding. The project area is set back at least 100 feet from the top of the streambank or riparian canopy, whichever is greater. Additionally, the project's sustainability-oriented design uses primarily native plants and features a stormwater collection system that directs parking lot runoff away from the creek. Proposed resource protection measures (Table 5) for implementing a Storm Water Pollution Protection Plan (SWPPP), along with two acres of habitat restoration adjacent to Stokes Creek, are included to protect and enhance water quality and riparian wetland habitat. The measures would also protect downstream water quality within Malibu Creek Watershed critical habitat from non-point source pollutant additions from future Visitor Center operation.

The site is of such small size, relative to their movements and home ranges, that the movements of larger carnivores, such as bobcats, coyotes, or mountain lions, would not be affected by the construction or use of the facility. Moreover, the lack of cover in the project area itself make it less conducive to wildlife movement, based on the extensive knowledge of carnivore movements and habitat use gained from NPS radio-tracking programs in and around SMMNRA. Carnivores may occasionally make use of the vegetation along Stokes Creek to move through the Ranch area, since riparian corridors are frequently used by radio-collared bobcats, coyotes, and mountain lions. However, because of the relatively developed nature of this part of the Ranch, use of this part of the creek by carnivores would likely be minimal. Moreover, the 100-foot setback from the creek, the avoidance of night lighting near the creek, and the proposed two-acre habitat restoration adjacent to Stokes Creek would result in minor beneficial impacts from Alternative B on carnivore movement through the creek corridor.

With implementation of proposed resource protection measures in Table 5, operation-related impacts on wildlife from Alternative B would be adverse, negligible to minor, long-term, and local.

Operation-related Impacts on Threatened and Endangered or Other Sensitive Species.

Operation-related impacts would be the same as for wildlife, in general. Listed or otherwise sensitive birds, bats, reptiles, and amphibians could potentially be affected by additional human presence, night lighting, and noise. Table 5 includes resource protection measures to protect listed or otherwise sensitive species as discussed in operation-related impacts on wildlife.

With implementation of the recommended resource protection measures in Table 5, operation-related impacts on wildlife from Alternative B are not likely to adversely affect threatened, endangered, or otherwise sensitive species that may be present within or adjacent to the project planning area.

CUMULATIVE IMPACTS

To evaluate cumulative impacts on wildlife and listed or otherwise sensitive species, the impacts of the project were considered in conjunction with the impacts of past, current, and foreseeable future suburban and rural estate development projects in SMMNRA, as summarized under cumulative impact contributors in Section 3.1.1. The projects are mostly north of King Gillette Ranch, and several are within existing developed areas. Some projects may have the potential to constrict, but not completely block, wildlife movement corridors. New development would add impervious surface area into Malibu Creek Watershed, thus increasing storm water runoff. However, NPDES permits require on-site retention of runoff and filtration to reduce the addition of non-point source pollutants into the stream network. Of more concern for cumulative impacts are proposals for estate compounds within as yet large undeveloped large expanses of private open space within Malibu Creek Watershed and adjacent areas. The proposed residences require new, long entrance roads, mile-long extensions of municipal water lines, and would introduce night lighting, and human sounds and smells into as yet undisturbed high quality habitat. Such projects would reduce available habitat for large carnivores and other wildlife, including SMMNRA species of concern, but would not impact any listed species.

Overall, the past, present, and reasonably foreseeable future actions in combination with Alternative B would have an adverse, minor, short- and long-term, regional impact on wildlife and listed or otherwise sensitive species. Alternative B would contribute negligibly to the cumulative impact. Alternative B is not likely to adversely affect threatened, endangered or otherwise sensitive species.

CONCLUSIONS

Wildlife. Alternative B would have construction-related adverse, minor, short-term, and local impacts with implementation of the recommended resource protection measures in Table 5, and operation-related adverse, negligible to minor, long-term, and local impacts. Alternative B would have a cumulative, adverse, minor, short- and long-term, regional impact. There would be no impairment of SMMNRA wildlife resources or values.

Threatened and Endangered or Other Sensitive Species. Construction-related or operationrelated impacts on wildlife from Alternative B are not likely to adversely affect threatened, endangered, or otherwise sensitive species that may be present within or adjacent to the project planning area with implementation of the recommended resource protection measures in Table 5. Alternative B, in conjunction with the cumulative past, present, and foreseeable project scenario, is not likely to adversely affect listed or otherwise sensitive species.

4.0 CONSULTATION AND COORDINATION

4.1 Public Scoping

Public scoping for the use of King Gillette Ranch as public parkland began just after the national recreation area was established in 1978. Preparation of the 1982 SMMNRA General Management Plan (GMP) was the first publicly reviewed document to include a jointly operated administration, environmental and cultural education center at King Gillette Ranch (then referred to as "Claretville"). Extensive public involvement reoccurred beginning in 1997, when scoping for the GMP update began, resulting in the current 2002 SMMNRA GMP/EIS. This planning effort continued the 1982 GMP's action for the joint facility at King Gillette Ranch and included a programmatic-level environmental impact analysis of the action.

NPS, CDPR, SMMC, and MRCA initiated a public scoping process for the King Gillette Ranch Design Concept Plan (DCP) on October 29, 2008. During the scoping period the agencies held an informal site visit on November 8, 2008, and a formal public scoping meeting on November 18, 2008, to present the DCP and potential environmental issues being considered for the planning process, and to gather public comments. The agencies received almost 200 comment letters and emails through the close of the scoping period on January 10th, 2009. These comments are summarized in Section 1.7.2. Copies of the federal, state and local agency scoping letters are available in Appendix B.

On September 24, 2009, and September 26, 2009, the agencies hosted two additional public workshops specifically about visitor-serving facilities. More than 50 people attended the two workshops. The workshops were structured to receive participants' input on desired visitor center amenities and services through their responses to a guided qualitative survey. Overall, the public expressed preferences for a less-developed facility with typical visitor center amenities.

4.2 Agency Consultation

Advisory Council on Historic Preservation, California State Historic Preservation Officer

The 1966 National Historic Preservation Act (NHPA), as amended in 1992, requires agencies to consult with the Advisory Council on Historic Preservation and State Historic Preservation Officer regarding undertakings that may affect historic properties. Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of their actions on properties that may be eligible for listing or are listed in the National Register of Historic Places. NPS commissioned the NPS, Pacific West Region, Cultural Resources Division, to conduct a cultural resources survey and inventory report within the area of potential effect for the entire King Gillette Ranch property, including the Visitor Center project planning area, to document the cultural resource effect determination for consideration by the State Historic Preservation Officer. The results of this study were that, although the site was deemed significant, it does not retain sufficient integrity from its period of significance, and therefore it is not eligible for the National Register of Historic Places (NPS 2007). The results of this study have been

incorporated into this EA and are being used to identify potential effects on historic properties in consultation with the Advisory Council on Historic Preservation and the California State Historic Preservation Officer (SHPO) (Appendix C). If analysis later reveals that historic properties could be affected, additional consultation with the SHPO would occur, including concurrence with the proposed determinations of effect.

Section 106 Status

In compliance with Section 106 of the National Historic Preservation Act, an initial cultural resources study of the structures, facilities and landscape at KGR was prepared (NPS 2007). This study concluded, and SHPO concurred, with the finding that the structures and landscape are ineligible for listing in the National Register. In accordance with 36 CFR 800.4(d)(1), additional concurrence from the SHPO will be sought as part of this EA process for a concurrence with the EA's determination of *no adverse effect* on archaeological and ethnographic resources from the actions proposed.

American Indian Consultation

Native American consultation has occurred in association with preparation of archaeological investigations on the Ranch (King 2006). The NPS will coordinate additional consultation with local Chumash representatives regarding the proposed preferred alternative to construct facilities for use as a visitor center.

California Coastal Commission

The project planning area is located within the California Coastal Zone, and therefore is subject to terms of the 1972 federal Coastal Zone Management Act (CZMA). NPS will prepare an analysis of this proposed project's consistency with policies of Chapter 3 of the 1976 California Coastal Act. The federal consistency determination will then be submitted to Coastal Commission for their review and approval process. This EA will be provided as part of the consistency determination process.

Los Angeles County

King Gillette Ranch is located in Los Angeles County, and is subject to the County's land use policies and zoning prescriptions. While NPS normally acts independently of local land use policies when the land is in federal ownership, the subject project planning area lies wholly within the California Coastal Zone. As such, the NPS acknowledges and, as part of adhering to the previously mentioned federal CZMA, attempts to maintain consistency with the land use policies in Los Angeles County's *Malibu Land Use Plan (LUP)*, prepared and approved by the Coastal Commission in 1986. The land use designations are described in Section 3.2.6. However, the *Malibu LUP* is only one component of the required twocomponent Local Coastal Programs that are certified by the Coastal Commission before permitting authority in the Coastal Zone is transferred from Coastal Commission to the local agency—Los Angeles County in this case. Therefore, Los Angeles County defers to the California Coastal Commission for approval of projects in the Coastal Zone. In this case, the previously mentioned federal consistency determination is the NPS's obligation to Coastal Commission, and indirectly, to Los Angeles County.

California Department of Fish and Game

The California Endangered Species Act (California Fish and Game Code § 2050, et seq.) generally parallels the main provisions of the Federal Endangered Species Act and is enforced by the California Department of Fish and Game. The National Park Service recognizes and manages state-listed threatened and endangered species similarly to federally listed species. Thus, NPS consults with the California Department of Fish and Game to ensure that any actions undertaken are not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

Los Angeles Regional Water Quality Control Board/State Water Resources Control Board

NPS will consult with the Los Angeles Regional Water Quality Control Board to ensure compliance with Section 401 of the Clean Water Act. The State Water Resources Control Board, with the applicable regional office covering Los Angeles, is delegated by the U.S. Environmental Protection Agency as the state water pollution control agency, responsible for implementing federal and state water pollution control laws and regulations. The project may be subject to permitting under the National Pollutant Discharge Elimination System (NPDES) Phase II requirements. The NPS may prepare a Storm Water Pollution Prevention Plan and submit it for approval as recommended in this EA's prescribed resource protection measures (Table 5).

U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service

NOAA's National Marine Fisheries Service has identified Malibu Creek Watershed as critical habitat for the endangered southern steelhead trout (*Oncorhynchus mykiss*) and for the endangered tidewater goby (*Eucyclogobius newberryi*). Because Stokes Creek is a tributary to the Malibu Creek Watershed, NPS consulted with the National Marine Fisheries Service to assure that the proposed project would have no effect on critical habitat for this species or for its potential restoration. The biological survey used for this EA concludes that Stokes Creek is too ephemeral to provide consistently appropriate habitat for steelhead (NPS 2009) and therefore, the project has no impact on these two species. The EA also includes mitigation measures that would minimize any potential effects on critical habitat and identifies restoration within the 100-foot setback for Stokes Creek that would improve the riparian habitat for all species.

U.S. Fish and Wildlife Service

Section 7 of the Endangered Species Act (1973) as amended (16 United States Code 1531 et seq.), requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) regarding any action authorized, funded, or carried out by a federal agency to ensure that it does not jeopardize any listed species or its critical habitat. This EA will be sent to the U.S. Fish and Wildlife Service with a letter requesting concurrence with the finding of no effect on federally listed species.

4.3 List of Recipients

The SMMNRA jurisdictional setting is nearly as diverse as the wild life found in the park. Several agencies have jurisdiction over or adjacent to King Gillette Ranch. Thus, this EA was distributed to approximately 300 recipients, including several public agencies as well as non-profit organizations and private stakeholders. Recipients of planning and compliance information include:

- Federal regulatory and land management agencies;
- State governmental and regulatory departments such as the Departments of Parks and Recreation and Fish and Game;
- Representatives of the local Chumash Band of Native Americans;
- The California State Historic Preservation Officer;
- Local communities and libraries, including Agoura Hills, Calabasas, Malibu, Santa Monica, and Thousand Oaks;
- Representatives of regional media, including newspaper, radio, and television;
- Outdoor enthusiast groups, including hiking, mountain biking, and horseback riding;
- Resource centers for Americans with disabilities;
- Environmental groups and wildlife supporters; and
- Interested individuals.

4.4 List of Preparers, Consultants, and Planning Team Members

Document Preparation

National Park Service – Santa Monica Mountains National Recreation Area

Melanie Beck – Outdoor Recreation Planner Margie Steigerwald – Outdoor Recreation Planner Tarja Sagar – Biological Technician Philip Holmes – Cultural Anthropologist Seth Riley – Wildlife Biologist Brendan Clarke – GIS Technician Ken Low – Park Ranger Ian Nicholson - Physical Science Technician Lena Lee – Inventory and Monitoring GIS Technician

National Park Service – Denver Service Center

Ric Alesch – Project Manager

Other Project Team Members

National Park Service – Santa Monica Mountains National Recreation Area

Woody Smeck, Superintendent

Lorenza Fong, Deputy Superintendent

John Tiszler, Acting Chief of Planning, Science and Resource Management

Meghan Kish, Chief of Interpretation

Lauren Newman, Policy and External Affairs Manager

Amy Yee, Visual Information Specialist

Jack Gillooly, Interpretive Ranger

Ray Sauvajot, former Chief of Planning, Science and Resource Management

National Park Service — Denver Service Center

Connie Chitwood, Natural Resource Specialist

Greg Cody, Technical Specialist for Cultural Resources

Margo Davis, Environmental Compliance Specialist

California Department of Parks and Recreation

Ron Schafer, Angeles District Superintendent

Karma Graham, Interpretation Specialist

Santa Monica Mountains Conservancy

Joe Edmiston, Executive Director

Rorie Skei, Deputy Executive Director

Mountains Recreation and Conservation Authority

Lisa Soghor, Deputy Executive Officer

Cara Meyer, Chief of Special Projects/Contracts Officer

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Acronyms

ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
BMPs	Best Management Practices
BP	Before Present
CBC	California Building Code
ССС	California Coastal Commission
CEQ	Federal Council on Environmental Quality
CFR	Code of Federal Regulations
CMA	Cooperative Management Agreement
CSP or CDPR	California State Parks, California Dept. of Parks and Recreation
CZMA	Coastal Zone Management Act of 1972
cm	Centimeter(s)
DCP	Design Concept Plan
GMP	General Management Plan
IS	Initial Study
kW	kilo-Watt
LEED	Leadership in Energy and Environmental Design
m	Meter(s)
MRCA	Mountains Recreation and Conservation Authority
NEPA	National Environmental Policy Act of 1969, as amended
NHPA	National Historic Preservation Act of 1966, as amended
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRA	National Recreation Area
NRHP	National Register of Historic Places
PL	Public Law
sq. ft.	Square Foot
SMMC	Santa Monica Mountains Conservancy
SMMNRA	Santa Monica Mountains National Recreation Area
SVVPPP	Storm Water Pollution Prevention Plan
USC	United States Code

APPENDICES

- A. Publing Scoping Comments Agency Letters
- B. Reasonably Foreseeable Projects Considered in Cumulative Analyses
- C. Historic Resource Consultation
- D. Traffic Study Summary Tables
- E. Biological Surveys

Tree Assessment for King Gillette Ranch Visitor Center November 2009

Biological Survey of King Gillette Ranch Plant Species May 2009

Plant Species Survey for Visitor Center Planning Area January 2010

Biological Survey of King Gillette Ranch Animal Species May 2009

Birds of Malibu Creek State Park 1990 – 2007

SMMNRA Threatened, Endangered, or Otherwise Sensitive Species—Animals

SMMNRA Threatened, Endangered, or Otherwise Sensitive Species—Plants

F. NRCS Consultation – Prime and Unique Farmland Soils

APPENDIX A

Public Agency Scoping Comments

for Anthony C. Beilenson Visitor Center at King Gillette Ranch Environmental Assessment

California Coastal Commission

California Department of Fish and Game

National Oceanic and Atmospheric Administration, National Marine Fisheries Service

GROUP D. OTHER AGENCIES

----- Forwarded by Margie Steigerwald/SAMO/NPS on 02/02/2009 10:51 AM -----"Larry Simon" <lsimon@coastal.ca.gov>

01/12/2009 12:50 PM

To <margie_steigerwald@nps.gov> cc Subject Request for Pre-Draft Scoping Comments

I received the above-referenced requests for the Diamond X Ranch/Solstice Canyon and King Gillette Ranch projects and understand that the comment deadlines for both have passed. However, I did want to notify the NPS that federal consistency review (negative or consistency determinations) will be required for both projects. I look forward to working with NPS staff as you prepare and submit your determinations to this office. Best regards,

Larry Simon Federal Consistency Coordinator Energy, Ocean Resources and Federal Consistency Division California Coastal Commission 45 Fremont St., Suite 2000 San Francisco, CA 94105 (415) 904-5288 Fax: (415) 904-5400 Isimon@coastal.ca.gov www.coastal.ca.gov

 "Scott P. Harris"

 <SPHARRIS@dfg.ca.go</td>
 To

 v>
 cc

 01/07/2009 01:21 PM
 Subject

 Subject
 Notice of Consultation for King Gillete Ranch Design

To Project Manager:

The Department of Fish and Game (Department) has reviewed the above-referenced Notice of Consultation (NOC) for a request for input on the environmental impact analysis for a project undergoing a joint NEPA/CEQA Environmental Assessment/Initial Study review process. The project is a design concept plan for the 588 acre King Gillette Ranch property located in the Calabasas area of Los Angeles County in the Santa Monica Mountains at the southeast corner of Mulholland Highway and Los Virgenes Road. The design concept will incorporate elements to protect and enhance existing biological, cultural and historical resources and will accommodate public access for nature enjoyment and other recreational uses. The design concept is proposed by the National Park Service, in coordination with the California Department of Parks and Recreation, Santa Monica Mountains Conservancy, and the Mountains

Recreation and Conservation Authority.

The Department recommends the following information, where applicable, be included in the Draft Environmental Report resulting from the Initial Study assessment under CEQA:

1. A complete, recent assessment of flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, and locally unique species and sensitive habitats (Attachment 1).

a. A thorough recent assessment of rare plants and rare natural communities, following the Department's Guidelines for Assessing Impacts to Rare Plants and Rare Natural Communities.

b. A complete, recent assessment of sensitive fish, wildlife, reptile, and amphibian species. Seasonal variations in use of the project area should also be addressed. Recent, focused, species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and U.S. Fish and Wildlife Service.

c. Rare, threatened, and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, Section 15380).

d. The Department's Biogeographic Data Branch in Sacramento should be contacted at (916) 322-2493 to obtain current information on any previously reported sensitive species and habitats, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code. Also, any Significant Ecological Areas (SEAs) or Environmentally Sensitive Habitat Areas (ESHAs) or any areas that are considered sensitive by the local jurisdiction that are located in or adjacent to the project area must be addressed.

2. A thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts. This discussion should focus on maximizing avoidance, and minimizing impacts.

a. CEQA Guidelines, Section 15125(a), direct that knowledge of the regional setting is critical to an assessment of environmental impacts and that special emphasis should be placed on resources that are rare or unique to the

region. b. Project impacts should also be analyzed relative to their effects on off-site

habitats and populations. Specifically, this should include nearby public lands,

open space, adjacent natural habitats, and riparian ecosystems. Impacts to and

maintenance of wildlife corridor/movement areas, including access to undisturbed habitat in adjacent areas are of concern to the Department and

should be fully evaluated and provided. The analysis should also include a

discussion of the potential for impacts resulting from such effects as increased

vehicle traffic, outdoor artificial lighting, noise and vibration.

c. A cumulative effects analysis should be developed as described under CEQA Guidelines, Section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

d. Impacts to migratory wildlife affected by the project should be fully evaluated including proposals to removal/disturb native and ornamental landscaping and other nesting habitat for native birds. For example there is a great-blue heron nesting site on the subject property. Impact evaluation may also include such elements as migratory butterfly roost sites and neo-tropical bird and waterfowl stop-over and staging sites. All migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (50 C.F.R. Section 10.13). Sections 3503, 3503.5 and 3513 of the California Fish and Game Code prohibit take of birds and their active nests, including raptors and other migratory nongame birds as listed under the MBTA. e. Impacts to all habitats from City or County required Fuel Modification Zones (FMZ). Areas slated as mitigation for loss of habitat shall not occur within the FMZ. f. Proposed project activities (including disturbances to vegetation) should take place outside of the breeding bird season (February 1- September 1) to avoid take (including disturbances which would cause abandonment of active nests containing eggs and/or young). If project activities cannot avoid the breeding bird season, nest surveys should be conducted and active nests should be avoided and provided with a minimum buffer as determined by a biological monitor (the Department recommends a minimum 500-foot buffer for all active raptor nests).

3. A range of alternatives should be analyzed to ensure that alternatives to the proposed project are fully considered and evaluated. A range of alternatives \which avoid or otherwise minimize impacts to sensitive biological resources including wetlands/riparian habitats, alluvial scrub, coastal sage scrub, etc. should be included. Specific alternative locations should also be evaluated in areas with lower resource sensitivity where appropriate.

a. Mitigation measures for project impacts to sensitive plants, animals, and habitats should emphasize evaluation and selection of alternatives which avoid or otherwise minimize project impacts. Compensation for unavoidable impacts
through acquisition and protection of high quality habitat elsewhere
should be
addressed with offsite mitigation locations clearly identified.
b. The Department considers Rare Natural Communities as threatened

habitats having both regional and local significance. Thus, these communities should be fully avoided and otherwise protected from project-related impacts (Attachment 2).

c. The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Department studies have shown that these efforts are experimental in nature and largely unsuccessful.

4. A California Endangered Species Act (CESA) Permit may be required from the Department if elements of the project has the potential to result in "take" of species of plants or animals listed under CESA, either during construction or over the life of the project. CESA Permits are issued to conserve, protect, enhance, and restore State-listed

threatened or endangered species and their habitats. Early consultation is encouraged, as significant modification to the proposed project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, require that the Department issue a separate CEQA document for the issuance of a CESA permit unless the project CEQA document addresses all project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of a CESA permit. For these reasons, the following information is requested:

a. Biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA Permit.

b. A Department-approved Mitigation Agreement and Mitigation Plan are

required for plants listed as rare under the Native Plant Protection Act.

5. The Department opposes the elimination of watercourses (including concrete channels) and/or the canalization of natural and manmade drainages or conversion to subsurface drains. All wetlands and watercourses, whether intermittent, ephemeral, or perennial, should be retained and provided with substantial setbacks which preserve the riparian and aquatic habitat values and maintain their value to on-site and off-site wildlife populations. The Department recommends a minimum natural buffer of 100 feet from the outside edge of the riparian zone on each side of a drainage. a. The Department may require a Streambed Alteration Agreement (SAA), pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant prior to any direct or indirect impact to a lake or stream bed, bank or channel or associated riparian resources. The Department's issuance of a SAA may be a project that is subject to CEQA. To facilitate our issuance of the Agreement when CEQA applies, the Department as a responsible agency under CEQA may consider the local jurisdiction's (Lead Agency) document for the project. To minimize additional requirements by the Department under CEQA the document should fully identify the potential impacts to the lake, stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the Agreement. Early consultation is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. Thank you for this opportunity to provide comment. Please myself, at (626) 797-3170 if you should have any questions and for further coordination on the proposed project. Scott Harris Environmental Scientist CA Department of Fish and Game Habitat Conservation Branch

The following attachment is on file with NPS.

Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Plant Communities

> State of California THE RESOURCES AGENCY Department of Fish and Game December 9, 1983, Revised May 8, 2000 Revised October 22, 2008



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802-4213

DEC 23 2008

In response refer to: T/SWR/2008/08016;SCG

Margie Steigerwald Santa Monica Mountains National Recreation Area National Parks Service 401 West Hillcrest Drive Thousand Oaks, California 91360-4207

Dear Ms. Steigerwald:

tan Kasar Ing

NOAA's National Marine Fisheries Service (NMFS) reviewed the National Parks Service's (NPS) December 4, 2008, Notice of Preparation of an Environmental Assessment (EA) for the proposed King Gillette Ranch Design Concept Project (Project). The proposed Project involves the redesign of the King Gillette Ranch area for the purposes of conservation, habitat restoration, and recreation. The proposed Project is of concern because endangered steelhead (Oncorhynchus mykiss) and critical habitat for this species are present in the affected area, in particular the Malibu Creek Watershed. Accordingly, the EA should clearly identify and describe the Project, including interrelated and interdependent actions to the extent that NMFS could develop an understanding of the potential effects (offsite, onsite, direct, indirect, temporary, and permanent) of the Project on steelhead and their critical habitat within Malibu Creek. The EA should include a list of measures for avoiding and minimizing potential negative effects of the Project on steelhead and their critical habitat. Unavoidable effects should be fully described according to life stage (i.e., spawning, rearing and migration) and features of this species' habitat. The manner in which the preferred alternative would be implemented (e.g., construction schedule, level of manpower, equipment types, access roads) should be clearly described. Additionally, the potential benefits of the Project for steelhead, including any compensatory mitigation measures (i.e., riparian restoration, fish passage barrier removal), should also be described. If applicable, engineered design drawings and results of topographic surveys and creek-hydraulic analyses should also be included in the EA.



NMFS appreciates the opportunity to provide the NPS with information that will support preparation of the EA and looks forward to review of the Project. Please contact Stan Glowacki at (562) 980-4061 or via email at Stan.Glowacki@noaa.gov if you have questions concerning this letter or if you would like additional information.

Sincerely,

4

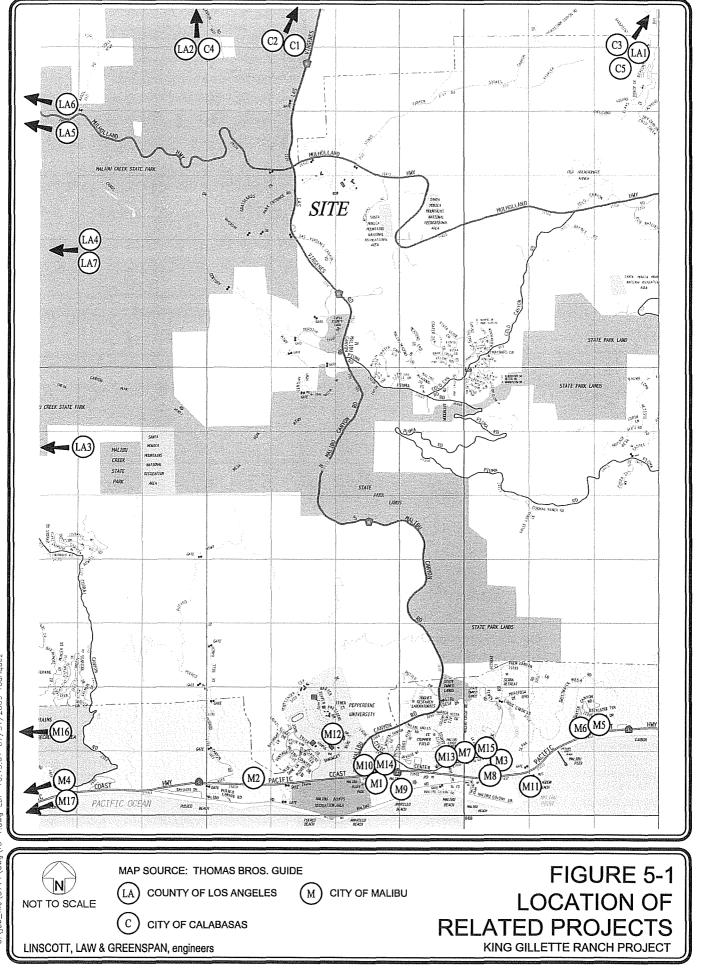
Rodney R. McInnis Regional Administrator

APPENDIX B

Cumulative Reasonably Foreseeable

Development Projects

for Anthony C. Beilenson Visitor Center at King Gillette Ranch Environmental Assessment



o:\job_file\3771\dwg\f5-1.dwg_LDP 10:13:01 07/31/2009 rodriguez

Table 5-1 LIST OF RELATED PROJECTS [1]

MAP NO.	PROJECT NAME/ PROJECT NUMBER	PROJECT STATUS	ADDRESS/ LOCATION	LAND USE D LAND-USE		SIZE		
1.0.1	I NOBELI NUMBER		County of Los Angeles	L BAND-USE	······			
LAI	04-031	Proposed	24121, 24141 Ventura Boulevard	Condominium	66	DU		
LA2	PM070606	Proposed	Between Mountain Road and Garrett Court	Adult Residential Facility Condominium	104,960 107			
LA3	R2005-02957	Proposed	2890 & 2900 Kanan Dume Road	Adult Residential Facility	20	Persons		
LA4	R2007-01282	Proposed	900 Latigo Canyon Road	Group Home	14	Children		
LA5	R2007-01394		28855 Lake Vista Drive	Adult Facility	20	Persons		
LA6	R2008-00641	Proposed	32111 Mulholland Highway	Winery	19,500	SF		
LA7	R2008-01116	Proposed	Thrift Road, East of Latigo Canyon Road	Wastewater Treatment Facility	70,142	SF		
	······································		City of Calabasas	· · · · · · · · · · · · · · · · · · ·				
С١	Project No. 080000510	Proposed	Northwest comer of Las Virgenes Road/ Thousand Oaks Boulevard intersection	Retail Office	25,820 35,074			
C2	Project No. 080000636	Proposed	26705 Malibu Hills Road	Condominium	60	DU		
С3	The Village at Calabasas Mixed-Use	Proposed	23500 Park Sorrento	Condominium Senior Housing Specialty Retail Quality Restaurant Restaurant - Outdoor Seating High-Turnover Restaurant Restaurant - Outdoor Seating	43 7,373 4,801 64 2,300	GSF Seats		
C4	Summit at Calabasas	Proposed	Northeast corner of Lost Hills Road/ Agoura Road intersection	Shopping Center	70,100	GSF		
C5	Calabasas Senior Housing	Proposed	South side of Calabasas Road, west of El Canon Avenue	Senior Housing	75	DU		
			City of Malibu		L			
мі	Single-Family Residential	Proposed	24200 Pacific Coast Highway	Single-Family Residence	5	DU		
M2	Office	Proposed	24903 Pacific Coast Highway	Office	9,700	GSF		
М3	Self-Storage	Proposed	Cross Creek Road/Civic Center Way	Self-Storage	56,000	GSF		
M4	Office	Proposed	6551 Portshead Road	Office	14,950	GSF		
M5	Restaurant	Proposed	22706 Pacific Coast Highway	Restaurant	7,250	GSF		
M6	Restaurant	Proposed	22716 Pacific Coast Highway	Restaurant	7,140	GSF		
M7	Malibu La Paz Project	Proposed	3700 La Paz Lane	53,825 77,110				
M8	Malibu Lumber Site	Proposed	La Paz Lane/Civic Center Way	28,000 2,000 (24,378)	GSF			
M9	AZ Winter Mesa Towing Site Subdivision	Proposed	d 23915 Malibu Road Single-Family Residence Open Space					

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Table 5-1 LIST OF RELATED PROJECTS [1]

MAP	PROJECT NAME/	PROJECT	ADDRESS/	LAND USE D	ATA
<u>NO.</u>	PROJECT NUMBER	STATUS	LOCATION	LAND-USE	SIZE
м10	Rancho Malibu Hotel	Proposed	4000 Malibu Canyon Road	Luxury Hotel	146 Rooms
мп	Malibu Lagoon State Beach Restoration	Proposed	23400 Pacific Coast Highway	Phase I: Relocation of Existing Parking Lot Phase II: Beach Restoration	-
M12	Pepperdine University Campus Life	Proposed	24255 Pacific Coast Highway	Campus-wide upgrades to athletic, recreation, parking, wellness, operational, and residential facilities	-
м13	Legacy Park Project	Proposed	23500 Civic Center Way	Passive Park Water Treatment Facility	15 Acres
M14	Crummer Site Subdivision	Proposed	24120 Pacific Coast Highway	Single-Family Residence	5 DU
M15	Papa Jack's Town Center	Proposed	Northwest corner of the Cross Creek Road/Civic Center Way intersection	Supermarket Restaurant Retail	35,000 GSF 3,000 GSF 16,650 GSF
M16	Trancas Canyon Park	Proposed	East side of Trancas Canyon Road	Park	13.6 Acres
M17	Howe's Market and Trancas Shopping Center Renovation	· Proposed	30745, 30811 Pacific Coast Highway	Retail	37,375 GSF

[1] Sources:

- County of Los Angeles Department of Regional Planning Cumulative Project Report, April 2009.

- City of Calabasas Planning Department

- City of Malibu Planning Department

APPENDIX C

Cultural Documentation

for Anthony C. Beilenson Visitor Center at King Gillette Ranch Environmental Assessment

Letter to State Historic Preservation Officer (SHPO) from NPS

Letter from State Historic Preservation Officer (SHPO) to NPS

Map of Area of Potential Effect



H3819(SAMO) April 6, 2007

Mr. Milford Wayne Donaldson Office of Historic Preservation Department of Parks and Recreation P.O. Box 942896 Sacramento California 94296

Dear Mr. Donaldson:

In accordance with Section 110 of the NHPA, we are seeking a consensus on the preliminary determination of eligibility for the Gillette Ranch located in the Santa Monica Mountains National Recreation Area, in Calabasas, Los Angeles County, California.

The document that served as the basis of that evaluation is enclosed. Entitled: *Gillette-Brown Ranch, Preliminary Determination of Eligibility,* the report contains a summary historic context, building inventory and evaluation, documentation and evaluation of the historic designed landscape, and preliminary statement of significance.

Although the property has a long history, the period of significance for this evaluation is limited to the years 1926 to 1952. These dates reflect the period when the property was purchased by King Camp Gillette—founder of the Gillette Razor Company, through ownership of the property by Hollywood movie director Clarence Brown. King Gillette and his wife hired Southern California Architect Wallace Neff to design their new home and developed the property as a gentleman's ranch. Neff designed and built three buildings, including a stable (1928), garage (1929), and large residence (1928). In addition to seven permanent buildings constructed in the first three years, the ranch had relatively extensive ornamental grounds employing several stylistic conventions associated with estate and landscape design in Southern California in the late 1920s including two formal axial gardens, a manmade pond, an entrance allée, and approximately 340 acres planted with trees, flowers, and shrubs collectively reflecting the quintessential country estate in Southern California during this era.

Gillette died shortly after the ranch was completed, and the property was sold to Hollywood director Clarence Brown in 1935. Brown hired Neff to design some changes to the residence, and added a swimming pool, tennis courts, and landing strip for small planes. He hosted parties for friends and business acquaintances including many of Hollywood's leading movie stars, and even used the property for filming his own movies. In 1952, Clarence Brown retired from the film industry and sold his Calabasas Ranch.

Based on historical research, field documentation, and evaluations, the historic structures and designed landscape associated with King Gillette and Clarence Brown are historically significant under National Register Criteria A for its association with events that have made a significant contribution to broader patterns of history, and Criteria C as the distinctive work of a master designer, possessing high artistic merit (the historic designed landscape, and historic architecture).

United States Department of the Interior

NATIONAL PARK SERVICE Santa Monica Mountains National Recreation Area 401 West Hillcrest Drive Thousand Oaks, California 91360-4207 Although we believe the property has historical significance, and in some ways still reflects the historic character of the Gillette-Brown eras, the majority of resources that comprised the significant designed landscape and all of the Wallace Neff buildings historically associated with the property no longer possess physical integrity. Virtually all of the impacts to integrity are the result of subsequent development on the property by different owners, and in many cases, major modifications to the structures and grounds to accommodate new uses. In this regard, all of the original Wallace Neff buildings have been highly altered and, in our opinion, no longer retain integrity of material, design, workmanship, setting, feeling, and association to be individually eligible to the National Register. A few structures do remain from the historic period with integrity (for example, the bridge over the Stokes Creek drainage channel, the White House and White House Garage, and the masonry barbeque structure) but these structures are not unusual or unique enough to meet the criterion for listing as individual structures.

The landscape, which was evaluated in terms of the historic design and the stylistic components that defined it, retains fragments of the original plan and design (historic entry system, spatial organization, some views, use of natural systems) but no longer retains the distinctive gardens and ornamental plantings around the building complex, key patterns and relationships throughout the property, and the materials that comprised the distinctive style of the design.

Because of these alterations and losses, we are seeking your concurrence that the individual buildings designed and constructed by Wallace Neff and others for King Gillette and the designed landscape from the period of significance 1926-1952, are not eligible for listing in the National Register.

As mentioned above, the property has a long and complex history dating to early use by the Chumash people who had a village on the site, through the era of missions, Spanish land grants, early settlers following the Homestead Act, estate development in the 1920s, to Hollywood in the 1930s, and various non-profit and private owners up to the present. Because of this history, the park and its partners recognize there are other periods of development that may be historically significant and merit further documentation. In this regard, it is the intent of the park and its partners that we will, in the future and pending available funding, undertake a more comprehensive evaluation and consolidate the findings in one or more formats such as a multiple property National Register nomination, archeological overview and assessment, a comprehensive cultural landscape report, and/or historic structures report for individual buildings based on proposals for adaptive reuse.

Please feel free to contact the following people if you have any questions about the review:

Cathy Gilbert, Lead, Cultural Landscape Program, Pacific West Region, Seattle, 206-220-4129, Dr. Elaine Jackson-Retondo, Architectural Historian, Pacific West Region, Oakland, 510-817-1428, Margie Steigerwald, Outdoor Recreation Planner, SAMO, 805-370-2373, Phil Holmes, Cultural Anthropologist, SAMO, 805-370-2335.

Sincerely,

Woody Smeck Superintendent Enclosure

OFFICE OF HISTORIC PRESERVATION DEPARTMENT OF PARKS AND RECREATION P O. BOX 942896 SACRAMENTO, CA 94285 0001

SACRAMENTO. CA 94296-0001 (916) 653-6624 Fax: (916) 653-9824 calshpo@ohp parks ca gov www ohp parks ca gov

16 May 2007

Reply To: NPS070424A

Woody Smeck, Superintendent Santa Monica National Recreation Area 401 West Hillcrest Drive Thousand Oaks, CA 91360-4207

Re: Section 110 Determination of Eligibility for Gillette Ranch, Santa Monica National Recreation Area, Los Angeles County, CA

Dear Mr. Smeck:

Thank you for your letter of 6 April 2007, seeking consensus on the determination of eligibility for the Gillette Ranch pursuant to Section 110 of the National Historic Preservation Act. The NPS has determined that the Gillette-Brown Ranch is not eligible for inclusion in the National Register of Historic Places (NRHP).

The NPS determined the Gillette-Brown Ranch was significant under Criterion A and under Criterion C. However, the property does not retain sufficient integrity to its period of significance and is not eligible for inclusion in the NRHP. The period of significance for the ranch is from 1926-1952 and the following buildings and features were evaluated:

- 1. Gillette Residence, 1928
- 2. Garage, 1929
- 3. Cook's House, 1928
- 4. Stable, 1928
- 5. White House, 1928
- 6. White House Garage, 1928
- 7. Brandt House
- 8. Brandt House Garage
- 9. Frisk House, 1927
- 10. The pond and dam, circa 1928
- 11. Barbeque, circa 1928 or 1929
- 12 Concrete Bridge, 1928 or 1929
- 13. Swimming Pool, 1937
- 14. Tennis Courts, circa 1937
- 15. Cistern and Reservoir ruins

I concur with this determination.

Thank you for considering historic properties as part of your project planning and I look forward to consultation on future projects. If you have any questions, please contact Amanda Blosser of my staff at (916) 654-9010 or e-mail at <u>ablosser@parks.ca.gov</u>.

Sincerely,

Sucar K Strattor for

Milford Wayne Donaldson, FAIA State Historic Preservation Officer

MWD:ab





APPENDIX D

Traffic

for Anthony C. Beilenson Visitor Center at King Gillette Ranch Environmental Assessment

Excerpted Pages from Traffic Impact Study for King Gillette Ranch, December 17, 2009. Pages 65-68: Summary of Street Segment Levels of Service and Summary of Intersection Delay and Levels of Service

Table 7-1 SUMMARY OF STREET SEGMENT LEVELS OF SERVICE WEEKDAY AM PEAK HOUR

		YEAR	2009 EXIST		YEAR 20	29 W/O PRO	DJECT [2]	PROJEC	CT ONLY	YEAR 202	29 WITH PR	OJECT [3]
			WEEKDAY			WEEKDAY			AM		WEEKDAY	
	STREET	ADT AM PK. HR.		ADT AM PK. HR.			ADT	PK. HR.	ADT		K. HR.	
NO.	SEGMENT	VOL.	VOL.	LOS	VOL.	VOL.	LOS	VOL.	VOL.	VOL.	VOL.	LOS
1	Las Virgenes Road north of Mulholland Highway [a]	25,214	2,017	E	30,256	2.420	F	388	156	30,644	2,576	F
2	Las Virgenes Road south of Mulholland Highway [a]	24,428	2,010	E	29,313	2,412	F	212	85	29,525	2,497	F
3	Mulholland Highway west of Las Virgenes Road [a]	1,187	132	В	1,424	158	В	50	20	1,474	178	В
4	Mulholland Highway east of Las Virgenes Road [a]	2,853	308	В	3,423	370	С	648	259	4,071	629	С
5	Malibu Canyon Road north of Pacific Coast Highway [b]	13,907	1,512	В	16,689	1,814	В	70	33	16.759	1,847	В
6	Pacific Coast Highway west of Malibu Canyon Road [b]	33.682	2.076	В	40,418	2.491	С	70	28	40.488	2.519	С
7	Pacific Coast Highway east of Cross Creek Road [b]	43,916	3,021	С	52,700	3.626	С	106	43	52,806	3,669	С

[a] Two-lane roadway. Level of Service based on HCM method of analysis for two-lane roadways.

[b] Multi-lane roadway. Level of Service based on HCM method of analysis for multi-lane roadways. The reported LOS represents the most constrained direction.

.

Table 7-2 SUMMARY OF STREET SEGMENT LEVELS OF SERVICE WEEKDAY PM PEAK HOUR

		YEAR	2009 EXIST	ING [1]	YEAR 20	29 W/O PRO	DJECT [2]	PROJEC	CT ONLY	YEAR 202	29 WITH PR	OJECT [3]
		WEEKDAY				WEEKDAY		_	PM		WEEKDAY	
	STREET	ADT PM PK. HR.		ADT PM PK. HR.			ADT	PK. HR.	ADT	PM P	K. HR.	
NO.	SEGMENT	VOL.	VOL.	LOS	VOL.	VOL.	LOS	VOL.	VOL.	VOL.	VOL.	LOS
1	Las Virgenes Road north of Mulholland Highway [a]	25,214	2,194	E	30.256	2.633	F	388	165	30,644	2,798	F
2	Las Virgenes Road south of Mulholland Highway [a]	24,428	2,136	E	29,313	2,563	F	212	90	29,525	2.653	F
3	Mulholland Highway west of Las Virgenes Road [a]	1,187	104	А	1,424	124	A	50	21	1.474	145	A
4	Mulholland Highway east of Las Virgenes Road [a]	2,853	233	В	3.423	279	В	648	276	4,071	555	С
5	Malibu Canyon Road north of Pacific Coast Highway [b]	13,907	946	А	16,689	1,135	A	70	30	16,759	1,165	A
6	Pacific Coast Highway west of Malibu Canyon Road [b]	33,682	2,745	В	40,418	3,294	С	70	30	40.488	3,324	С
7	Pacific Coast Highway east of Cross Creek Road [b]	43.916	3,533	С	52,700	4,240	С	106	46	52.806	4.286	С

[a] Two-lane roadway. Level of Service based on HCM method of analysis for two-lane roadways.

[b] Multi-lane roadway. Level of Service based on HCM method of analysis for multi-lane roadways. The reported LOS represents the most constrained direction.

Table 7-3 SUMMARY OF STREET SEGMENT LEVELS OF SERVICE SATURDAY MID-DAY PEAK HOUR

		YEAR	2009 EXIST	ING [1]	YEAR 20	29 W/O PRO	DJECT [2]	PROJE	CTONLY	YEAR 202	9 WITH PR	OJECT [3]
			SATURDAY		L	SATURDAY			MID-DAY		SATURDAY	
	STREET	ADT		<u>Y PK. HR.</u>	ADT		Y PK. HR.	ADT	PK. HR.	ADT		Y PK. HR.
NO.	SEGMENT	VOL.	VOL.	LOS	VOL.	VOL.	LOS	VOL.	VOL.	VOL.	VOL.	LOS
1	Las Virgenes Road north of Mulholland Highway [a]	19,187	1,809	E	23,025	2,170	E	684	159	23,709	2,329	Е
2	Las Virgenes Road south of Mulholland Highway [a]	18,671	1,835	E	22.405	2,202	E	374	87	22,779	2,289	E
3	Mulholland Highway west of Las Virgenes Road [a]	1,472	170	В	1,766	204	В	88	21	1,854	225	В
4	Mulholland Highway east of Las Virgenes Road [a]	2,168	191	В	2,602	229	В	1,144	266	3.746	495	С
5	Malibu Canyon Road north of Pacific Coast Highway [b]	11,216	1.169	А	13,459	1,403	A	124	29	13.583	1,432	A
6	Pacific Coast Highway west of Malibu Canyon Road [b]	37,131	3,026	С	44,557	3,632	С	124	29	44,681	3,661	С
7	Pacific Coast Highway east of Cross Creek Road [b]	38,938	3,009	В	46.726	3,611	С	186	43	46.912	3.654	С

[a] Two-lane roadway. Level of Service based on HCM method of analysis for two-lane roadways.

[b] Multi-lane roadway. Level of Service based on HCM method of analysis for multi-lane roadways. The reported LOS represents the most constrained direction.

Table 7-4
SUMMARY OF INTERSECTION DELAY & LEVELS OF SERVICE [a]

		[1] YEAR 2 EXISTI		[2] YEAR 2 WITHOUT F		[3] YEAR 2 WITH PRO		CHANGE		CHANGE	
	PEAK	DELAY		DELAY		DELAY		DELAY	DELAY		DELAY
INTERSECTION	HOUR	(SEC/VEH)	LOS	(SEC/VEH)	LOS	(SEC/VEH)	LOS	[(3)-(2)]	(SEC/VEH)	LOS	[(4)-(2)]
I Las Virgenes Road & Mulholland Highway [b]	Weekday AM Weekday PM Saturday Midday	46.4 32.4 8.3	D C A	106.0 82.8 12.4	F F B	106.0 101.4 27.7	F F C	0.0 18.6 15.3	74.7 76.6 16.6	E E B	-31.3 -6.2 4.2
2 Stokes Canyon Road & Mulholland Highway [c]	Weekday AM Weekday PM Saturday Midday	10.4 10.0 9.7	B A A	10.9 10.4 10.0	B B B	11.1 10.6 10.2	B B B	0.2 0.2 0.2		 	

Notes:

[a] Delay values (in seconds per vehicle) based on the Highway Capacity Manual (HCM 2000) methodology.

[b] Intersection analyzed using the HCM 2000 Signalized Intersections methodology.

[c] Intersection analyzed using the HCM 2000 Unsignalized Intersections methodology.
 Reported delay values and LOS reflect the most constrained movement at the intersection.

APPENDIX E

Biological Reports

for Anthony C. Beilenson Visitor Center at King Gillette Ranch Environmental Assessment

Tree Assessment for King Gillette Ranch Visitor Center November 2009

Biological Survey of King Gillette Ranch Plant Species May 2009

Plant Species Survey for Visitor Center Planning Area January 2010

Biological Survey of King Gillette Ranch Animal Species May 2009

Birds of Malibu Creek State Park 1990 – 2007

SMMNRA Threatened, Endangered, or Otherwise Sensitive Species—Animals

SMMNRA Threatened, Endangered, or Otherwise Sensitive Species—Plants

MOUNTAINS RECREATION & CONSERVATION AUTHORITY



Los Angeles River Center and Gardens 570 West Avenue Twenty-six, Suite 100 Los Angeles, California 90065 Phone (323) 221-9944 Fax (323) 441-8691

Summary of Tree Assessment – King Gillette Ranch

Performed 11/20/09 by Lorenzo Mateo, ISA Certified Arborist

3 Oaks (Quercus agrifolia) behind new plaza

All three Oaks are in reasonably good condition, showing normal foliage and little to no decay. All three should be pruned to reduce end weight for safety and crown clean. Oak #863 has some fill material around the root crown; this should be removed as soon as possible. Arborist recommends protecting the root zone 5' beyond dripline.

2 Oaks (Quercus lobata) in new plaza

Both of these Oaks are in fair condition, with chlorotic foliage and some decay/damage at the root crown. This is caused by approximately 16" of fill material which should be immediately removed. The smaller one has been topped. Both Oaks should be pruned for crown clean and further inspected after fill has been removed. Arborist recommends protecting the root zone 5' beyond dripline.

5 Sycamores (Platanus racemosa) around courtyard

All five Sycamores are in average to good condition but are carrying excessive weight at branch ends. All five should should be pruned to reduce end weight for safety, crown clean, and thinned. Sycamore #876 exhibits some decay.

1 Oak (Quercus lobata) adjacent to object theatre location

This Oak is in good to excellent condition but should be pruned to remove dead limbs and crown clean.

King Gillette Ranch Tree Assessment

Inspector name: Lorenzo Mateo ISA Certified Arborist

Inspector name: Lorenzo Mateo ISA Certified Arborist					-										
Tree Number	NTg	Ntg	NTg	NTg	863	864	865	866	872	873	874	875	876	877	878
Species															
Quercus agrifolia -Coast Live Oak					х	х	х								1
Quercus lobata -Valley Oak								х						х	х
Platanus racemosa -California Sycamore									х	х	х	х	х		1
Fraxinus species-Ash Tree	Х														1
Need to identify tree species		х	х	х											
Approx Diameter at Breast Height 4.5'	35"	7"	11"	9"	25"	31"	50"	30"	38"	32"	27"	27"	36"	21"	16"
Approximate Height	60'	20'	25'	20'	25'	35'	55'	65'	75'	60'	65'	65'	60'	35'	25'
Approx spread	19'	12'	12'	12'	30'	32'	50'	25'	25'	25'	25'	25'	25'	18'	21'
Crown Class: dominant	x	12	12	12	50	52	X	23 X	<u>x</u>	25	X	X	X	X	- 21
co-dominant	~ ~					х	~	~	~	х	~	~	~	A	х
intermediate		х			х	~				~					
suppressed		~	х	х	~										+
Pruning History: Crown Clean			~	~											-
excessively thinned															1
topped															x
crown raised	x	х	<u> </u>	х	х	х	х		<u> </u>						<u> </u>
crown reduced	^	^		~	~	^	~								
cabled/braced															
Special Value: heritage/historic															
indigenous					х	х	х	х	х	х	х	х	х	х	x
protected by gov. agcy					x	x	X	X	~	~	~	~	~	X	x
shade/screen	x	х	х	х	~	^	~	~						~	
street tree	~	~	~	~											
Foliage Color: normal		х	х	х	х	х	х	х	х	х	х	х	х		+
chlorotic	x	^	^	^	^	^	^	^	^	^	^	^	^	х	х
necrotic	^													^	<u> </u>
Epicormics? Y = yes N = no	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N
Foliage size: normal	IN .	X	X	X	X	X	X	X	X	X	X	X	X	X	X
small	x	^	^	^	^	^	^	^	^	^	^	^	^	^	^
Annual Shoot growth: excellent	^					х									
		х	x	x	х	^	х	х	x	х	х	х	х	х	х
average poor	x	^	^	^	^		^	^	^	^	^	^	^	^	^
Twig Dieback? Y = yes N = no	Y	N	N	Y	N	N	N	N	N	N	N	N	N	N	+
Wound Development: excellent	T	IN	IN	T	IN	IN	IN	IN	IN	IN	IN	IN	IN	IN	+
average		х	х				х			х	х		х	х	+
poor	x	^	^	x	х		^			^	^		^	^	+
Vigor Class: excellent=A average=B fair=C poor=D	^	с	В	^ D	B	Α	В	Α	В	В	В	В	В	с	с
Site: compacted by vehicle/traffic		Ľ	D	D	X	X	X	~	в	В	Б	В	В	x	
% root crown/dripline w/fill soil:					^ 10-25%		^								50-75%
Soil Heaving: Y = yes N = no	N	N	N	N			N	N	N	N	N	N	N		50-75% N
Soil reaving: Y = yes N = no	N	N N	N N	N	N	N N	N N	N N	N	N N	N N	N	N	N N	N
Roots Broken: Y = yes N = no					N	N									
Decay in plane of lean: $Y = yes N = no$	N	N	N	N	N		N	N	N	N	N	N	N	N	N
	N	N	N	N	N	N	N	N	N	N	N	N	N	N X	N X
Decay: root crown		х	X	х	v									×	×
trunk					X										+
% root crown/dripline w/fill soil: Soil Heaving: Y = yes N = no Soil cracking: Y = yes N = no Roots Broken: Y = yes N = no Decay in plane of lean: Y = yes N = no Decay: root crown trunk branch	Х												Х		

King Gillette Ranch Tree Assessment

Inspector name: Lorenzo Mateo ISA Certified Arborist

	Tree Number	NTg	Ntg	NTg	NTg	863	864	865	866	872	873	874	875	876	877	878
Tree Healt	Cavity: root crown		Х		Х											1
Ë	trunk					х										1
e l	branch													х		1
Tre	Multiple Attachments: root crown		Х		Х											1
•	trunk							х								1
	branch						Х									1
	Co dominant/Included Bark: root crown				Х											
	trunk	Х								х						х
	branch					х					х	х				
	Excessive end weight					х				х	х	х	х	х		
	Cracks/Splits: root crown															
	trunk											х				
	branch							х			х	х		х		
	Bleeding/Sap flow															
	Loose/Cracked Bark: root crown														х	х
	trunk															
	branch															
	Branch Previous failure for excessive end weight										х	х		х		
	Dead limbs	Х			Х	х		х	х							
sures	Reduce end weight for Safety					х	х	х		х	х	х	х	х		
Sur	Crown Clean					х	Х	х	х	х	х	х	х	х	х	х
ea	Thin									х	х	х	х	х		
Σ	Remove excess soil 16" around root crown/dripline														х	х
Suggested	Remove tree Declining/Safety	Х			Х											1
est	Inspect further decay	Х													х	х
88	Move target: Y =yes N =no	Ν	Ν	Ν	Ν	Y	Y		N	N						х
Su	Protect Oak tree protected root zone 5' beyond dripline					х	Х	х							х	х
	Failure potential: 1-low; 2-medium; 3-high; 4-severe	3	1	1	3	2	1	1	1	3	3	2	2	3	1	1
	Size of part: 1 -<6"; 2 - 6-18"; 3 - 18-30"; 4 - >30"	2	2	2	2	2	2	2	1	2	2	2	2	2	3	2
<u>6</u>	Target rat: 1- occas.; 2 intermittent; 3 frequent; 4 const use	4	3	3	3	3	3	3	3	4	3	3	4	3	3	3
Rating	Total Hazard rating	9	6	6	8	7	6	6	5	9	8	7	8	8	7	6
Ra	Target use under tree: Building	Х							х	Х				х		
Hazard	recreation	х	х	х	х	х	х	Х	х	х	х	х	х	х	х	х
aza	parking					х										
Ĩ	traffic					х	Х	Х					Х	х		
	utility lines															Х
	utility mes															~

Key for Comments:

NTg = Not Tagged

Biological Survey of King Gillette Ranch – Plant Species

Conducted by the National Park Service in support of environmental analysis for the King Gillette Ranch Design Concept Plan

May 2009

BIOLOGICAL RESOURCES, PLANTS

The purpose of this survey and report is to update The Soka University Master Plan Biological Assessment Report (Arnold 1991) and Biological Resources Inventory (Envicom Corporation 1991). The project site was surveyed on 24 March, 3 April, and 9 May 2009 by National Park Service (NPS) Botanist, Tarja Sagar to document vegetation types and native and non-native flora, including threatened and endangered species, as well as locally uncommon species in the Santa Monica Mountains. Surveys were conducted on foot along roads and trails and cross country where possible. Natural habitat in the southern half and northeastern quarter of the property were searched carefully for vascular plant species; the cultural landscape in the northwestern quarter of the property received only minor attention. The Soka University Master Plan Biological Assessment Report (Arnold 1991) and Biological Resources Inventory (Envicom Corporation 1991) were used to guide location of sensitive species. A complete list of species found during the Envicom (1991) and National Park Service (2009) surveys is provided in Appendix 1.

VEGETATION COMUNITIES

The following vegetation communities were mapped on the project site by NPS in 2001. Community types are classified following the Alliance-Association vegetation taxonomy of the Manual of California Vegetation (Sawyer and Keeler-Wolf 1995). Descriptions are based on field observations and information derived from the Vegetation Classification of the Santa Monica Mountains National Recreation Area and Environs (Keeler-Wolf and Evens 2006). The report by Arnold (1991) follows an earlier, more aggregated classification system used in the California Natural Diversity Database (Holland 1986). Corresponding Arnold (1991) types are noted at the end of each Alliance or Association description.

Quercus agrifolia South Coastal Woodland Association

The tree layer is dominated by *Quercus agrifolia* with *Platanus racemosa* and *Juglans californica* occasionally included. The shrub layer is sparse to open and includes *Heteromeles arbutifolia, Ceanothus spinosus, Rhamnus ilicifolia, Rhus ovata, Keckiella cordifolia,* and *Toxicodendron diversilobum*. The herbaceous layer is diverse and occasionally includes herbs such as *Leymus condensatus* in low cover. This association corresponds to Arnold (1991) Southern Coast Live Oak Woodland.

Quercus agrifolia/Annual Grass-Herb Woodland Association

The tree layer is dominated by *Quercus agrifolia* with *Platanus racemosa* with *Juglans californica* occasionally included. The shrub layer is sparse to intermittent and occasionally includes *Artemisia*

californica, Sambucus Mexicana, and *Malosma laurina*. The herbaceous layer is diverse and dominated by non-native annual grasses. This association is included in Arnold (1991) Southern Coast Live Oak Woodland.

Quercus lobata/Annual Grass-Herb Woodland Association

The tree layer is dominated by *Quercus lobata* with *Quercus agrifolia* included in low cover. Presently, after a small fire in 2008, the shrub layer is missing and the understory is dominated by non-native annual grasses, *Brassica nigra*, *Hirschfeldia incana* and *Silibum marianum*. This association corresponds to Arnold (1991) Valley Oak Woodland.

Salix laevigata – Salix lasiolepis Woodland Association

The tree layer is dominated by *Salix laevigata* and *S. lasiolepis*. The shrub layer is sparse to intermittent and occasionally includes *Baccharis salicifolia*, and a variety of native and non-native grasses and forbs. This community type roughly corresponds to Arnold (1991) Riparian Scrub, however it appears that there has been much vegetation recovery since the 1991 report and what was riparian scrub is now best characterized as woodland.

Adenostoma fasciculatum Shrubland Alliance

The shrub layer is characterized by an abundance of *Adenostoma fasciculatum*. *Malosma laurina* and *Salvia mellifera* also occur in this layer. Within the Gillette Ranch boundaries, this type includes the following associations: *Adenostoma fasciculatum-Malosma laurina*, *Adenostoma fasciculatum-Ceanothus crassifolius-Malosma laurina*, *Adenostoma fasciculatum-Eriogonum fasciculatum* and *Adenostoma fasciculatum-Salvia mellifera-Malosma laurina*. The herb layer is sparse and often includes such forbs as *Nassella lepida* and *Cryptantha* spp. This type is included in Arnold (1991) Chaparral.

Ceanothus crassifolius Shrubland Association

The shrub layer is dominated by *Ceanothus crassifolius* with *Adenostoma fasciculatum* included in low cover. The herbaceous layer is sparse, occasionally including forbs such as *Marah macrocarpus* and *Cryptantha* spp. This association corresponds to Arnold (1991) *Ceanothus crassifolius* Chaparral with *A. fasciculatum* and Arnold (1991) Buck Brush Chaparral.

Cercocarpus betuloides-Ceanothus spinosus Shrubland Association

The shrub layer is dominated by *Cercocarpus betuloides*. *Heteromeles arbutifolia, Ceanothus spinosus* and *Rhus ovatifolia* occur in low cover. This shrubland type occurs throughout the property on lower north facing slopes below *Adenostoma fasciculatum* and *Ceanothus crassifolius* Chaparral types. This type is included in Arnold (1991) Chaparral.

Malosma laurina Shrubland Association

The shrub layer is characterized by an abundance of *Malosma laurina*. *Salvia mellifera* and/or *Eriogonum fasciculatum* are included in this layer, often co-dominating the stand. The herbaceous layer is often diverse, including spring annuals such as *Camissonia* spp. and *Cryptantha* spp. This type is included in Arnold (1991) Venturan Coastal Sage Scrub

Quercus berberidifolia Shrubland Association

The shrub layer is dominated by *Quercus berberidifolia*. Other shrubs occurring infrequently are *Adenostoma fasciculatum*, *Rhus ovata*, and *Malosma laurina*. The herbaceous layer is sparse and includes *Melica imperfecta* and non-native annual grasses. This type is included in Arnold (1991) Chaparral.

Eriogonum fasciculatum-Salvia mellifera-Malosma laurina Shrubland Association

In this association, *Eriogonum fasciculatum, Salvia mellifera* and *Malosma laurina* co-dominate. *Yucca whipplei* and *Rhus ovata* are commonly included in this community type. The herbaceous layer is often diverse, including spring annuals such as *Camissonia* spp., *Cryptantha* spp. and *Phacelia* spp. This type is included in Arnold (1991) Venturan Coastal Sage Scrub.

California Annual Grassland/Herbaceous Alliance

Non-native annual grasses and forbs dominate. A variety of native herbs such as *Lupinus succulentus* and *Hemizonia fasciculate* occur in low cover. This type corresponds to Arnold (1991) Non-native Grassland.

SPECIES OF LOCAL SIGNIFICANCE

No state or federally listed or candidate rare, threatened or endangered plant species, including those listed in Arnold (1991) as potentially occurring at the project site, were observed. The occurrence of species on the CNPS "Watch List" (*Quercus lobata* and *Brickellia nevinii*) and species uncommon in the Santa Monica Mountains (*Agrostis diegoensis, Amorpha californica, Baccharis malibuensis, Calochortus splendens, Lupinus microcarpus* [*L. subvexus*], *Mimulus pilosus*, and *Nicotiana quadrivalvis* [N. bigelovii]) listed in Biological Resources Inventory supplemental (Envicom Corporation 1991) were reconfirmed.

Thingrass (*Agrostis pallens*) is a perennial grass known from open meadows and woodlands (Hickman 1996). The species has been reported from oak woodlands southeast of the 'Spenseley Home.' A small colony of 3 plants was confirmed from that area in April 2009.

False Indigo (*Amorpha californica*) occurs in woodland and chaparral slopes (Hickman 1996). Approximately 35 individuals were located in the Southern Oak Woodland bordering the grasslands south of the main building complex. Several individuals were confirmed to occur also along the southern oak woodland north east of Diamond X Ranch during winter 2009. Malibu Baccharis (*Baccharis malibuensis*) is known only from the central Malibu Creek drainage. Approximately 15 individuals were observed along the ridgeline between Gillette Ranch and Diamond X properties. A second location along ridgeline between Gillette Ranch and Hindu Temple had burned in the recent fire. However, several resprouts were observed along the fire break. Known occurrence of a few scattered individuals southeast of the Cook's House is being invaded by *Spartium junceum*.

Nevin's Brickellia (*Brickellia nevinii*) is a pale green, soft hairy sub-shrub that occurs on dry, exposed, rocky slopes in openings in coastal sage scrub and chaparral (Hickman 1996). Frequent scattered individuals were observed in the northeastern quadrant of the Gillette property on steep volcanic outcrops.

Indian tobacco (*Nicotiana quadrivalvis*), an aromatic, glandular annual, is known from open, well-drained washes and slopes (Hickman 1996). This plant is known from a knoll at the northwest quadrant of Gillette Ranch and was last observed in May 2007. As an annual forb, it may not express itself every year. However, the knoll is being taken over by non-native annual grasses.

Splendid mariposa (*Calochortus splendes*) is a slender perennial from a bulb, known from dry soils in grassland openings in coastal sage scrub and chaparral (Hickman 1996). This species is known from the open grassy edges of southern oak woodlands in the eastern half of Gillette Ranch. The woodland edge with dense understory of shrubs such as poison oak (*Toxicodendron diversilobum*) and holly-leaf redberry (*Rhamnus ilicifolia*) is bordered by dense non-native annual grasses and mustards. While splendid mariposa was not found in those areas, frequent individuals of this species were observed flowering in the northeast quadrant of Gillette Ranch.

Valley Lupin (*Lupinus microcarpus*) is an annual lupine that occurs at open or disturbed areas such as along roads, trails and grassland edges (Hickman 1996). A population of approximately 50 individual was observed along the dirt road leading to the view point knoll at the southeast corner of the main campus.

Downey Monkeyflower (*Mimulus pilosus*) is a slender soft hairy annual of moist sandy places, especially running or dry streamlets (Hickman 1996). This species is known to occur as scattered individuals along seasonal drainages in the northeastern quadrant of the Gillette Ranch. Although only one small population of several flowering individuals was observed along one of the forks of the main drainage in the northeast quadrant, this annual species may not fully express itself every year.

Valley Oak (*Quercus lobata*) is a deciduous tree that occurs on rich loam in valleys and on slopes below 2000 feet (Hickman 1996). Valley Oaks are scattered occurrences throughout on the lower slopes within central areas of the Gillette Ranch. A larger oak savanna occurs on the west-facing slopes adjacent to

Malibu Canyon Road in an area of recent burn. Although any seedlings or younger saplings were lost in the fire, the mature oaks appear to have survived in good condition.

Additionally, the NPS survey found locally and state-wide uncommon California cloakfern (*Notholaena californica*), which is known to occur on dry rocky slopes, in rock crevices, and under rock ledges at elevations 200 – 1300 m (Hickman 1996). Six individuals of this species were observed in rock crevices on volcanic outcroppings in the northeastern quadrant of the Gillette Ranch.

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APPENDIX 1. Species Observed at Gillette Ranch by Envicom (1991) and National Park Service (2009) Surveys

*	Reported in Envico	om Su	rvev 1991
!	-		ark Service March – May 2009
•	Family		SciName
	Non-flowering Plants		Sen unite
	SELAGINELLACEAE	*!	Selaginella bigelovii
	DRYOPTERIDACEAE		Dryopteris arguta
	POLYPODIACEAE		Polypodium californicum
	PTERIDACEAE		Adiantum capillus-veneris
	PTERIDACEAE		Adiantum jordanii
	PTERIDACEAE		Aspidotis californica
	PTERIDACEAE		Notholaena californica ssp. leucophylla
	PTERIDACEAE		Pellaea andromedifolia
	PTERIDACEAE	*!	Pellaea mucronata
	PTERIDACEAE		Pentagramma triangularis ssp. triangularis
	I I LIGD/ICE/IE	•	r enagramma mangalaris ssp. mangalaris
	Flowering Plants		
	AMARANTHACEAE	*	Amaranthus albus
	ANACARDIACEAE	*!	Malosma laurina
	ANACARDIACEAE	*	Rhus integrifolia
	ANACARDIACEAE	*!	Rhus ovata
	ANACARDIACEAE	*!	Rhus trilobata
	ANACARDIACEAE	*!	Toxicodendron diversilobum
	APIACEAE	*!	Anthriscus caucalis
	APIACEAE	*!	Apiastrum angustifolium
	APIACEAE	!	Apium graveolens
	APIACEAE	!	Daucus pusillus
	APIACEAE	!	Lomatium dasycarpum ssp. dasycarpum
	APIACEAE	!	Lomatium utriculatum
	APIACEAE	*!	Sanicula arguta
	APIACEAE	!	Sanicula crassicaulis
	APIACEAE	!	Sanicula tuberosa
	APIACEAE	!	Yabea microcarpa
	APOCYNACEAE	!	Vinca major
	ASCLEPIADACEAE	*!	Asclepias californica
	ASCLEPIADACEAE	*!	Asclepias fascicularis
	ASTERACEAE	!	Achyrachaena mollis
	ASTERACEAE	!	Acourtia microcephala
	ASTERACEAE	!	Agoseris grandiflora
	ASTERACEAE	!	Ambrosia psilostachya
	ASTERACEAE	!	Artemisia californica
	ASTERACEAE	!	Artemisia douglasiana
	ASTERACEAE	!	Artemisia dracunculus
	ASTERACEAE	!	Baccharis malibuensis
	ASTERACEAE	*!	Baccharis pilularis
	ASTERACEAE	*!	Baccharis salicifolia
	ASTERACEAE	*!	Brickellia californica
	ASTERACEAE	*!	Brickellia nevinii
	ASTERACEAE	*!	Carduus pycnocephalus
	ASTERACEAE	*!	Centaurea melitensis
	ASTERACEAE	*!	Chaenactis artemisiifolia
	ASTERACEAE	*!	Chaenactis glabriuscula var. glabriuscula
	ASTERACEAE	*!	Cirsium occidentale var. californicum
	ASTERACEAE	*!	Cirsium vulgare
	ASTERACEAE	*	Cnicus benedictus

ASTERACEAE * Coreopsis bigelovii ASTERACEAE *! Corethrogyne filaginifolia ! ASTERACEAE Cotula australis * ASTERACEAE Cotula coronopifolia ASTERACEAE ! Cynara cardunculus *! ASTERACEAE Deinandra fasciculata * ASTERACEAE Delairea odorata *! ASTERACEAE Encelia californica ASTERACEAE *! Erigeron foliosus var. foliosus ASTERACEAE *! Eriophyllum confertiflorum var. confertiflorum ASTERACEAE ! Glebionis coronaria ! ASTERACEAE Grindelia camporum var. camporum ASTERACEAE *! Hazardia squarrosa var. grindelioides ASTERACEAE * Helianthus annuus ASTERACEAE *! Helianthus gracilentus *! ASTERACEAE Helmintotheca echioides ASTERACEAE *! Heterotheca grandiflora ASTERACEAE * Heterotheca villosa *! ASTERACEAE Hypochaeris glabra *! ASTERACEAE Isocoma menziesii var. menziesii ASTERACEAE *! Iva axillaris ASTERACEAE *! Lactuca serriola * ASTERACEAE Lasthenia californica *! ASTERACEAE Logfia californica *! ASTERACEAE Logfia gallica * Madia elegans ASTERACEAE ASTERACEAE ! Madia exigua *! ASTERACEAE Malacothrix saxatilis var. tenuifolia *! ASTERACEAE Matricaria matricarioides *! ASTERACEAE Micropus californicus var. californicus ASTERACEAE ! Microseris douglasii ssp. douglasii ASTERACEAE *! Pseudognaphalium biolettii ASTERACEAE *! Pseudognaphalium californicum *! Pseudognaphalium luteoalbum ASTERACEAE *! ASTERACEAE Rafinesquia californica ASTERACEAE *! Senecio vulgaris ASTERACEAE *! Silybum marianum ! ASTERACEAE Solidago californica ASTERACEAE ! Sonchus asper ssp. asper ASTERACEAE *! Sonchus oleraceus ASTERACEAE *! Stebbinsoseris heterocarpa *! ASTERACEAE Stephanomeria cichoriacea * ASTERACEAE Stephanomeria virgata ASTERACEAE *! Stylocline gnaphaloides ASTERACEAE *! Taraxacum officinale *! ASTERACEAE Uropappus lindleyi *! ASTERACEAE Venegasia carpesioides * ASTERACEAE Xanthium spinosum * ASTERACEAE Xanthium strumarium *! BORAGINACEAE Amsinckia menziesii var. intermedia BORAGINACEAE ! Amsinckia menziesii var. menziesii BORAGINACEAE ! Cryptantha clevelandii *! BORAGINACEAE Cryptantha intermedia *! BORAGINACEAE Cryptantha micromeres BORAGINACEAE ! Cryptantha microstachys BORAGINACEAE *! Cryptantha muricata BORAGINACEAE * Heliotropium curassavicum

BORAGINACEAE ! Pectocarya linearis ssp. ferocula BRASSICACEAE ! Athysanus pusillus *! BRASSICACEAE Brassica nigra ! BRASSICACEAE Brassica rapa BRASSICACEAE *! Capsella bursa-pastoris BRASSICACEAE ! Coronopus didymus *! BRASSICACEAE Erysimum capitatum ssp. capitatum * BRASSICACEAE Guillenia lasiophylla *! BRASSICACEAE Hirschfeldia incana BRASSICACEAE *! Raphanus sativus BRASSICACEAE 1 Rorippa nasturtium-aquatica * BRASSICACEAE Sisymbrium altissimum BRASSICACEAE * Sisymbrium irio BRASSICACEAE * Sisymbrium officinale BRASSICACEAE *! Sisymbrium orientale BRASSICACEAE ! Thysanocarpus curvipes BRASSICACEAE *! Thysanocarpus laciniatus CACTACEAE * Cylindropuntia prolifera * CACTACEAE Opuntia littoralis var. littoralis * CAPPARACEAE Isomeris arborea CAPRIFOLIACEAE *! Lonicera subspicata var. denudata CAPRIFOLIACEAE *! Sambucus mexicana *! CAPRIFOLIACEAE Symphoricarpos mollis CARYOPHYLLACEAE ! Minuartia douglasii * CARYOPHYLLACEAE Silelene laciniata *! CARYOPHYLLACEAE Silene gallica *! CARYOPHYLLACEAE Stellaria media CARYOPHYLLACEAE ! Stellaria nitens * CHENOPODIACEAE Chenopodium album * CHENOPODIACEAE Chenopodium ambrosioides * CHENOPODIACEAE Chenopodium berlandieri CHENOPODIACEAE *! Chenopodium californicum CHENOPODIACEAE *! Salsola australis CONVOLVULACEAE *! Calystegia macrostegia *! CONVOLVULACEAE Cuscuta californica CRASSULACEAE ! Dudleya lanceolata CUCURBITACEAE * Cucurbita foetidissima *! CUCURBITACEAE Marah macrocarpus var. macrocarpus * CYPERACEAE Carex sp. DATISCACEAE ! Datisca glomerata ERICACEAE *! Arctostaphylos glandulosa ssp. mollis EUPHORBIACEAE * Chamaesyce albomarginata ! EUPHORBIACEAE Chamaesyce polycarpa var. polycarpa EUPHORBIACEAE * Chamaesyce sp. EUPHORBIACEAE *! Croton setigerus EUPHORBIACEAE ! Euphorbia terracina *! FABACEAE Amorpha californica var. californica *! FABACEAE Hoita macrostachya *! FABACEAE Lathyrus vestitus var. vestitus *! FABACEAE Lotus purshianus var. purshianus FABACEAE *! Lotus salsuginosus var. salsuginosus *! FABACEAE Lotus scoparius var. scoparius *! FABACEAE Lotus strigosus FABACEAE ! Lotus wrangelianus FABACEAE *! Lupinus bicolor FABACEAE *! Lupinus hirsutissimus FABACEAE Lupinus latifolius ssp. latifolius !

FABACEAE *! Lupinus longifolius *! FABACEAE Lupinus microcarpus var. microcarpus *! Lupinus succulentus FABACEAE *! FABACEAE Lupinus truncatus FABACEAE ! Medicago polymorpha *! FABACEAE Melilotus alba *! FABACEAE Melilotus indicus *! FABACEAE Spartium junceum FABACEAE ! Trifolium ciliolatum FABACEAE ! Trifolium gracilentum FABACEAE *! Trifolium willdenovii FABACEAE ! Vicia sativa ssp. sativa FABACEAE *! Vicia villosa ssp. varia FAGACEAE *! Quercus agrifolia var. agrifolia *! Quercus berberidifolia FAGACEAE *! FAGACEAE Quercus lobata GERANIACEAE *! Erodium botrys GERANIACEAE *! Erodium cicutarium *! Erodium moschatum GERANIACEAE GERANIACEAE ! Geranium carolinianum GROSSULARIACEAE * Ribes aureum var. gracillium GROSSULARIACEAE * Ribes californicum *! GROSSULARIACEAE Ribes indecorum GROSSULARIACEAE *! Ribes speciosum HYACINTHACEAE ! Chlorogalum pomeridianum var. pomeridianum *! HYDROPHYLLACEAE Emmenanthe penduliflora var. penduliflora HYDROPHYLLACEAE *! Eriodictyon crassifolium var. crassifolium HYDROPHYLLACEAE *! Eucrypta chrysanthemifolia var. chrysanthemifolia * HYDROPHYLLACEAE Nemophila menziesii ! HYDROPHYLLACEAE Nemophila pedunculata *! HYDROPHYLLACEAE Phacelia cicutaria var. hispida HYDROPHYLLACEAE * Phacelia distans HYDROPHYLLACEAE * Phacelia grandiflora *! Phacelia imbricata ssp. imbricata HYDROPHYLLACEAE HYDROPHYLLACEAE ! Phacelia parryi HYDROPHYLLACEAE *! Phacelia ramosissima HYDROPHYLLACEAE * Phacelia viscida ! HYDROPHYLLACEAE Pholistoma auritum var. auritum *! JUGLANDACEAE Juglans californica var. californica LAMIACEAE ! Lamium amplexicaule LAMIACEAE *! Marrubium vulgare * LAMIACEAE Mentha spicata *! LAMIACEAE Salvia apiana LAMIACEAE *! Salvia columbariae LAMIACEAE *! Salvia leucophylla *! LAMIACEAE Salvia mellifera LAMIACEAE ! Stachys albens LAMIACEAE ! Trichostema lanatum * Trichostema lanceolatum LAMIACEAE * LAURACEAE Umbellularia californica MALVACEAE ! Lavatera cretica *! MALVACEAE Malacothamnus fasciculatus *! MALVACEAE Malva parviflora MYRTACEAE ! Eucalyptus camaldulensis MYRTACEAE Eucalyptus ciderocalyx ! MYRTACEAE *! Eucalyptus sp. NYCTAGINACEAE Mirabilis laevis spp. crassifolius !

ONAGRACEAE *! Camissonia bistorta * ONAGRACEAE Camissonia intermedia ! Camissonia micrantha ONAGRACEAE ONAGRACEAE ! Camissonia strigulosa * ONAGRACEAE Clarkia bottae ONAGRACEAE ! Clarkia cylindrica ssp. cylindrica ONAGRACEAE ! Clarkia epilobioides *! ONAGRACEAE Clarkia purpurea ssp. quardivulnera ONAGRACEAE *! Clarkia unguiculata ONAGRACEAE ! Epilobium brachycarpum ONAGRACEAE *! Epilobium canum ssp. canum *! ONAGRACEAE Eulobus californica PAEONIACEAE *! Paeonia californica PAPAVERACEAE ! Dendromecon rigida PAPAVERACEAE *! Eschscholzia californica ssp. californica PAPAVERACEAE ! Meconella denticulata PAPAVERACEAE ! Romneya coulteri PLANTAGINACEAE *! Plantago erecta *! PLANTAGINACEAE Plantago lanceolata *! PLANTAGINACEAE Plantago major *! PLATANACEAE Platanus racemosa POLEMONIACEAE *! Allophyllum glutinosum POLEMONIACEAE ! Eriastrum densifolium var. densifolium *! POLEMONIACEAE Eriastrum sapphirinum *! POLEMONIACEAE Gilia angelensis *! POLEMONIACEAE Gilia capitata ssp. abrotanifolia *! POLEMONIACEAE Leptodactylon californicum ssp. californicum POLYGALACEAE ! Polygala cornuta var. fishiae POLYGONACEAE *! Chorizanthe staticoides POLYGONACEAE ! Eriogonum cinereum POLYGONACEAE ! Eriogonum cithariforme POLYGONACEAE *! Eriogonum elongatum POLYGONACEAE *! Eriogonum fasciculatum var. fasciculatum * POLYGONACEAE Eriogonum gracile ! POLYGONACEAE Polygonum arenastrum POLYGONACEAE ! Polygonum lapathifolium POLYGONACEAE ! Pterostegia drymarioides POLYGONACEAE ! Rumex conglomeratus *! POLYGONACEAE Rumex crispus PORTULACEAE Calandrinia breweri ! PORTULACEAE * Calandrinia ciliata ! PORTULACEAE Calyptridium monandrum PORTULACEAE ! Claytonia parviflora ssp. parviflora PORTULACEAE *! Claytonia perfoliata ssp. perfoliata PRIMULACEAE *! Anagallis arvensis RANUNCULACEAE ! Clematis lasiantha *! RANUNCULACEAE Delphinium cardinale *! RANUNCULACEAE Delphinium parryi ssp. parryi RANUNCULACEAE ! Delphinium patens ssp. hepaticoideum ! RANUNCULACEAE Ranunculus californicus RANUNCULACEAE ! Ranunculus hebecarpus *! RHAMNACEAE Ceanothus crassifolius *! RHAMNACEAE Ceanothus cuneatus *! RHAMNACEAE Ceanothus megacarpus RHAMNACEAE * Ceanothus oliganthus RHAMNACEAE *! Ceanothus spinosus RHAMNACEAE *! Rhamnus californica ssp. californica

RHAMNACEAE*!Rhamnus ilicifoliaROSACEAE*!Adenostoma fasciculatumROSACEAE*!Cercocarpus betuloides var. betuloidesROSACEAE*!Heteromeles arbutifoliaROSACEAE*!Potentilla glandulosa sap. glandulosaROSACEAE*!Pranus ilicifolia sp. ilicifoliaROSACEAE*!Robac californicaROSACEAE*!Rubus ursinusRUBIACEAE*!Galium angustifolium ssp. angustifoliumRUBIACEAE*!Galium aparineRUBIACEAE*!Galium nuttallii sp. nuttalliiSALICACEAE*!Salix laevigataSALICACEAE*!Salix laevigataSALICACEAE*!Salix laevigataSALICACEAE*!Salix laevigataSALICACEAE!!Salix lasiolepisSAXIFRAGACEAE!!Salix lasiologiiSCROPHULARIACEAE!!Antirrhinum coulterianumSCROPHULARIACEAE!!Castilleja affinis ssp. affinisSCROPHULARIACEAE!!Costillegi affinis ssp. affinisSCROPHULARIACEAE!!Collinsia parryiSCROPHULARIACEAE!!Cordylanthus rigidus ssp. setigerusSCROPHULARIACEAE!!Mimulus guitatusSCROPHULARIACEAE!!Mimulus guitatusSCROPHULARIACEAE!!Mimulus pilosusSCROPHULARIACEAE!!Penstemon centranhifoliusSCROPHULARIACEAE!!Penstemon speciabilisSCROPHULARIACEAE!!Penstemon speciabilisSCROPHU	RHAMNACEAE	*!	Rhamnus crocea
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	VISCACEAE	*	Phoradendron macrophyllum
ZYGOPYLLACEAE * Tribulus terrestris	VISCACEAE	*	Phoradendron villosum
	ZYGOPYLLACEAE	*	Tribulus terrestris
	Monocots	*1	Hasparovucca whipplai

Monocots		
AGAVACEAE	*!	Hesperoyucca whipplei
IRIDACEAE	*!	Sisyrinchium bellum
JUNCACEAE	*	Juncus phaeocephalus
JUNCACEAE	!	Juncus xiphioides

LILIACEAE	*	Allium hematochiton
LILIACEAE	*!	Bloomeria crocea
LILIACEAE	*!	Calochortus catalinae
LILIACEAE	*!	Calochortus clavatus
LILIACEAE	*!	Calochortus splendens
LILIACEAE	!	Chlorogalum pomeridianum var. pomeridianum
LILIACEAE	*!	Dichelostemma capitatum ssp. capitatum
LILIACEAE	*	Lilium humboldtii
LILIACEAE	*!	Zigadenus fremontii
ORCHIDACEAE	*	Epipactis gigantea
POACEAE	*!	Achnatherum coronatum
POACEAE	*!	Agrostis pallens
POACEAE	!	Arundo donax
POACEAE	!	Avena barbata
POACEAE	!	Avena fatua
POACEAE	!	Avena sativa
POACEAE	*!	Bromus carinatus var. carinatus
POACEAE	*!	Bromus diandrus
POACEAE	*!	Bromus hordeaceus
POACEAE	!	Bromus laevipes
POACEAE	*!	Bromus madritensis ssp. rubens
POACEAE	*!	Bromus tectorum
POACEAE	*!	Cynodon dactylon
POACEAE	!	Ehrharta erecta
POACEAE	*!	Elymus glaucus ssp. glaucus
POACEAE	*!	Hordeum murinum
POACEAE	*	Hordeum vulgare
POACEAE	*!	Leymus condensatus
POACEAE	!	Leymus triticoides
POACEAE	*	Lolium perenne
POACEAE	*!	Melica imperfecta
POACEAE	*!	Muhlenbergia microsperma
POACEAE	*!	Nassella lepida
POACEAE	*!	Nassella pulchra
POACEAE	!	Phalaris canariensis
POACEAE	!	Phalaris paradoxa
POACEAE	!	Piptatherum miliaceum
POACEAE	!	Poa annua
POACEAE	*!	Poa secunda ssp. secunda
POACEAE	*!	Polypogon monspeliensis
POACEAE	*	Schismus arabicus
POACEAE	!	Schismus barbatus
POACEAE	!	Vulpia microstachys var. microstachys
POACEAE	!	Vulpia myuros var. myuros
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Plant Species Observed Within and Adjacent to Project Planning Area for the proposed Anthony C. Beilenson Visitor Center at King Gillette Ranch

January 10, 2010

Prepared by Tarja Sagar, Botanist

National Park Service, Santa Monica Mountains National Recreation Area

Scientific name

Common name

Ambrosia psilostachya Amsinckia menziesii var. intermedia Anagallis arvensis Artemisia californica Atriplex semibaccata Avena barbata Brassica nigra Bromus diandrus Bromus madritensis ssp. rubens Calystegia macrostegia Camissonia bistorta Camissonia micrantha Capsella bursa-pastoris Carduus pycnocephalus Casuarina equisetifolia Centaurea melitensis Chenopodium californicum Chenopodium murale Chorizanthe staticoides Cirsium vulgare Corethrogyne filaginifolia Cryptantha muricata Cylindropuntia sp. Cynodon dactylon Ehrharta erecta Eriogonum fasciculatum var. fasciculatum Erodium cicutarium Erodium moschatum Eucalyptus camaldulensis Eucalyptus sideroxylon Eulobus californicus Fraxinus sp. Grindelia camporum var. camporum Helmintotheca echioides Hesperoyucca whipplei Heterotheca grandiflora Hirschfeldia incana Juncus sp.

Western ragweed common fiddleneck scarlet pimpernel California sagebrush creeping saltbush wild oat black mustard ripgut brome foxtail brome wild morning glory sun-cup small evening primrose shepherd's purse Italian thistle horsetail she oak tocalote California goosefoot cut-leaved goosefoot Turkish rugging bull thistle wooly aster popcorn flower Bermuda grass smilo grass California buckwheat red-stem filaree white-stem filaree red ironbark California sun-cup ash gum plant bristly ox-toungue Lord's candle telegraph weed Mediterranean mustard rush

Lactuca serriola Lamium amplexicaule Ligustrum lucidum Logfia gallica Lolium perenne Lonicera subspicata var. denudata Lotus scoparius var. scoparius Malacothrix saxatilis var. tenuifolia Malva parviflora Marrubium vulgare Nicotianan bigelovii **Opuntia** basilaris **Opuntia ficus-indica** Oxalis pes-caprae Penstemon centranthifolius Phoradendron macrophyllum Plantago lanceolata Plantago major Platanus racemosa Polygonum arenastrum Prunus ilicifolia ssp. ilicifolia Pseudognaphalium californicum Quercus agrifolia var. agrifolia Quercus lobata Rhamnus californica ssp. californica Rhamnus crocea Rhamnus ilicifolia Rumex crispus Salsola australis Salvia apiana Salvia columbariae Salvia mellifera Schismus barbatus Senecio vulgaris Silybum marianum Sisymbrium orientale Sonchus asper ssp. asper Sonchus oleraceus Thuja occidentalis Trifolium repens Vinca major

prickly lettuce henbit privet narrowleaf cottonrose perennial ryegrass chaparral honeysuckle deerweed cliff aster cheeseweed horehound Indian tobacco beaver-tail cactus Bermuda buttercup scarlet bugler big leaf mistletoe English plantain common plantain Western sycamore common knotweed hollyleaf cherry California everlasting coast live oak valley oak coffeeberry redberry hollyleaf redberry curly dock white sage chia black sage common groundsel milk-thistle oriental mustard prickly sow thistle sow thistle Eastern arborvitae white clover

periwinkle

Biological Survey of King Gillette Ranch – Animal Species

Conducted by the National Park Service in support of environmental analysis for the King Gillette Ranch Design Concept Plan

May 2009

Walking wildlife surveys were performed on two consecutive days by survey teams of 2-5 members in the developed ranch area, in the riparian area, along the Ridgeline Trail, and along the Gillette Ranch Loop Trail in April 2009. These areas can be divided into two basic land use classes: the developed area that includes the developed ranch areas and riparian areas, and the natural area that includes the ridgeline trail and Gillette Ranch Loop Trail. Additionally the developed area includes a large cement lined artificial pond.

Wildlife surveys were conducted by professional National Park Service biologists with extensive experience inventorying and monitoring wildlife in the Santa Monica Mountains. Survey team biologists included Dr. Seth Riley, Joanne Moriarty, Jack Gillooly, and Lena Lee.

DEVELOPED AREAS

The following species were confirmed in the developed areas through direct observation or other identifying sign such as song, scat, tracks, or mounds.

<u>Avian</u>

Acorn Woodpecker (*Melanerpes formicivorus*) Allen's Hummingbird (Selasphorus sasin) American Crow (Corvus brachyrhynchos) American Robin (*Turdus migratorius*) Anna's Hummingbird (*Calypte anna*) Ash-throated Flycatcher (Myiarchus cinerascens) Band-tailed Pigeon (*Patagioenas fasciata*) Belted Kingfisher (*Megaceryle alcyon*) Black-headed Grosbeak (Pheucticus melanocephalus) Black Phoebe (Sayornis nigricans) Bullock's Oriole (*Icterus bullockii*) Bushtit (*Psaltriparus minimus*) Cassin's Kingbird (Tyrannus vociferans) Cliff Swallow (Petrochelidon pyrrhonota) Common Raven (Corvus corax) Dark-eyed Junco (Junco hyemalis) European Starling (Sturnus vulgaris) Falcon sp. (American Kestrel) (Falco sparverius) Great Blue Heron (Ardea herodias)

Hooded Oriole (*Icterus cucullatus*) House Finch (Carpodacus mexicanus) House Wren (*Troglodytes aedon*) Lesser Goldfinch (*Carduelis psaltria*) Mallard (Anas platyrhynchos) Northern Flicker (song) (Colaptes auratus) Northern Rough-winged Swallow (Stelgidopteryx serripennis) Nuttall's Woodpecker (Picoides nuttallii) Oak Titmouse (Baeolophus inornatus) Pacific-slope Flycatcher (Empidonax difficilis) Purple Finch (song) (Carpodacus purpureus) Red-tailed Hawk (Buteo jamaicensis) Red-winged Blackbird (Agelaius phoeniceus) Rufous Hummingbird (Selasphorus rufus) Song Sparrow (Melospiza melodia) Spotted Towhee (*Pipilo maculatus*) Wilson's Warbler (song) (Wilsonia pusilla) Western Bluebird (Sialia mexicana) Western Scrub-Jay (Aphelocoma californica) Yellow Warbler (Dendroica petechia)

Reptiles

Western fence lizard (Sceloporus occidentalis)

<u>Mammals</u>

California ground squirrel (*Spermophilus beecheyi*) Eastern fox squirrel (*Sciurus niger*) Valley pocket gopher (mounds) (*Thomomys bottae*) Western gray squirrel (*Sciurus griseus*)

NATURAL AREAS

The following species were confirmed in the natural areas through direct observation or other identifying sign such as song, scat, tracks, or mounds.

<u>Avian</u>

Acorn Woodpecker (*Melanerpes formicivorus*) American Robin (*Turdus migratorius*) Anna's Hummingbird (*Calypte anna*) Ash-throated Flycatcher (*Myiarchus cinerascens*) Blue-gray gnatcatcher (*Polioptila caerulea*) Bushtit (*Psaltriparus minimus*) California Quail (*Callipepla californica*) California Towhee (*Pipilo crissalis*) Cliff Swallow (*Petrochelidon pyrrhonota*) Cooper's Hawk (*Accipiter cooperil*) Hooded Oriole (*Icterus cucullatus*) House Finch (*Carpodacus mexicanus*)

Reptiles

Side-blotched lizard (*Uta stansburiana*) Western fence lizard (*Sceloporus occidentalis*)

<u>Mammals</u>

Bobcat (scat) (*Lynx rufus*) California ground squirrel (*Spermophilus beecheyi*) Coyote (scat, tracks) (*Canis latrans*) Desert cottontail (*Sylvilagus audubonii*) Mule deer (scat) (*Odocoileus hemionus*) Valley pocket gopher (mounds) (*Thomomys bottae*) Lesser Goldfinch (*Carduelis psaltria*) Mourning Dove (*Zenaida macroura*) Oak Titmouse (*Baeolophus inornatus*) Olive-sided Flycatcher (*Contopus cooperi*) Pacific-slope Flycatcher (*Empidonax difficilis*) Red-tailed Hawk (*Buteo jamaicensis*) Spotted Towhee (*Pipilo maculatus*) Turkey Vulture (*Cathartes aura*) Western Bluebird (*Sialia mexicana*) Western Bluebird (*Tyrannus verticalis*) Western Scrub-Jay (*Aphelocoma californica*) Wrentit (*Chamaea fasciata*) Yellow-rumped warbler (*Dendroica coronata*)

Invertebrates

Western Tiger Swallowtail (*Papilio rutulus*) California Sister (*Adelpha californica*) Cabbage White (*Pieris rapae*) Buckeye (*Junonia Coenia*) Chalcedon Checkerspot (*Occidryas chalcedona*) Sara Orangetip (*Anthocharis sara*)

Additionally a red-tailed hawk, a great blue heron and many cliff swallows were observed exhibiting nesting behavior around the developed area. An active red-tailed hawk nest was found in the eucalyptus grove adjacent to the basketball court, and an active great blue heron nest was found in a pine tree above the pond.

National Park Service biologists have documented use of Gillette Ranch by mountain lions (*Puma concolor*) through GPS telemetry.

SENSITIVE SPECIES

The following animals are listed as Special Animals in the California Department of Fish and Game's California Natural Diversity Database and were observed within the project area.

- Olive-sided Flycatcher (*Contopus cooperi*) CA Fish and Game Species of Special Concern, IUCN-Near Threatened, US Fish and Wildlife Service Bird of Conservation Concern. The olive-sided flycatcher's preferred nesting habitat is post-fire woodlands, but it will also substitute artificial post-disturbance woodlands (e.g. after logging), as well. Gillette Ranch does not represent either of these preferred habitats and therefore is not likely to support a breeding population.
- Yellow Warbler (*Dendroica petechia*) CA Fish and Game Species of Special Concern. The yellow warbler prefers moist shady areas with dense shrubbery, such as the edge of marshes, swamps, or streams. In wet years there may be some potential nesting habitat along the stream at Gillette Ranch, but none of the potentially suitable habitat will be significantly impacted under any of the proposed conceptual plan alternatives.
- Great Blue Heron (*Ardea herodias*) CNDDB Special Animal, IUCN- Least Concern. Great blue herons preferred habitat includes lakes, ponds, marshes, rivers, or other year-round water sources with tall trees for nesting. The artificial pond at Gillette Ranch offers this habitat, but it is of relatively low quality. Project implementation should take this species into account. Under the proposed alternatives for Gillette Ranch, the habitat for this species may be improved with wetland and riparian restoration/enhancement.
- Cooper's Hawk (*Accipiter cooperii*) CA Fish and Game Watch List, IUCN- Least Concern. Cooper's hawks are present and nest in riparian and oak woodland areas such as are present in low-lying areas and along the creek. The project would not result in the loss of suitable habitat for this species.
- Bobcat (*Lynx rufus*) CNDDB Special Animal. The chaparral and other areas of thick vegetation in the natural area may represent preferred habitat for bobcats and they may den in some of these areas. The project will result in little to no loss of this habitat, and the large home ranges of this

species make it unlikely to be affected by this loss. Bobcats in southern California typically den in spring and prefer well protected sites often in thick brush and well away from high use trails. Disturbance from the project is unlikely to be in close enough proximity to any bobcat den sites to create adverse affects.

Mountain Lion (*Puma concolor*) - CA Fish and Game Species of Special Concern. Although NPS biologists have detected mountain lions in the Gillette Ranch area, there is only one GPS location within Gillette Ranch out of the thousands of locations recorded from 12 lions in the area over the last seven years. Therefore this area does not represent an area of frequent use, although certainly mountain lions do occasionally traverse the property. The large home ranges and wide movements of this species make it unlikely to be significantly affected by any localized disturbances that may occur under the proposed alternatives at Gillette Ranch.

The following animals are listed as Special Animals in the California Department of Fish and Game's California Natural Diversity Database and are known to reside within the general vicinity, but were not observed within the project area.

- Golden Eagle (*Aquila chrysaetos*) CA Fish and Game Fully Protected and Watch List, IUCN- Least Concern, US Fish and Wildlife Service Bird of Conservation Concern. Golden eagles have been occasionally sighted in Palo Comado and Cheeseboro Canyons, north of the 101 freeway, and a nest was observed on a powerline pylon in the Simi Hills in 1988 (NPS Surveys 2000-2009), but eagles are not known to nest in the Gillette Ranch area. The project will not result in any loss of suitable habitat and is not expected to significantly impact this species.
- California Horned Lark (*Eremophila alpestris actia*) CA Fish and Game Watch List, IUCN- Least Concern. California horned larks have been occasionally observed in Cheeseboro Canyon (NPS surveys 2000-2009). Annual grassland is considered suitable habitat for this species, but Gillette Ranch is mostly composed of chaparral, costal sage scrub, oak woodlands, and poor quality weedy habitat. The project is unlikely to result in loss of breeding territory for this species, if present, and therefore, impacts are considered less than significant.
- Loggerhead Shrike (*Lanius ludovicianus*) CA Fish and Game Species of Special Concern, IUCN-Least Concern. Loggerhead shrikes were observed in upper Las Virgenes Canyon, 2006 and 2009 (Hardesty 2009). Annual grassland is considered suitable habitat for this species, but Gillette Ranch is mostly composed of chaparral, costal sage scrub, oak woodlands, and poor quality weedy habitat. The project is unlikely to result in loss of breeding territory for this species, if present, and therefore, impacts are considered less than significant.
- Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*) CA Fish and Game Watch List. Rufous-crowned sparrows were observed in upper Las Virgenes Canyon, 2005 and 2007 (Hardesty 2009), and may nest in habitats within the project area. Therefore project activity conducted during the breeding season may potentially impact the breeding success of this species. Appropriate mitigation measures should be implemented to reduce these potential impacts.
- Bell's Sage Sparrow (*Amphispiza belli*) CA Fish and Game Watch List, US Fish and Wildlife Service Bird of Conservation Concern. Bell's sage sparrows have been reported from Oak Park in 1982, and may occur in purple sage scrub in Palo Comado and Cheeseboro Canyons (Scott & Weir 1982). They may also nest in habitats within the project area. Therefore project activity conducted during the breeding season may potentially impact the breeding success of this

species. Appropriate mitigation measures should be implemented to reduce these potential impacts.

- Lark Sparrow (*Chondestes grammacus*) IUCN- Least Concern. Lark sparrows have been observed in upper Las Virgenes Canyon, 2006, 2008, and 2009 (Hardesty 2009). Annual grassland is considered suitable habitat for this species, but Gillette Ranch is mostly composed of chaparral, costal sage scrub, oak woodlands, and poor quality weedy habitat. The project is unlikely to result in loss of breeding territory for this species, if present, and therefore, impacts are considered less than significant.
- California Red-legged Frog (*Rana aurora draytonii*) Federal Threatened, CA Fish and Game Species of Special Concern, IUCN- Vulnerable. California red-legged frogs have been observed in East Las Virgenes Creek, about 5 miles north of Gillette Ranch (NDDB, 2007) and were historically present in Malibu creek, just to the west. The stream habitat in Gillette ranch is not suitable for red-legged frogs, and there are no potential project impacts to this species.

Numerous migratory birds protected under California Fish and Game Code Section 3503 and the Migratory Bird Treaty Act, including most of those observed, may nest in the habitats in and around Gillette Ranch. Therefore project activity conducted during the breeding season could affect the breeding success of these species. Appropriate mitigation measures should be implemented to reduce these potential impacts.

There are a number of reptile and amphibian species that, while not detected during the surveys, are potentially or likely present at the site. The stream through the property was completely dry in late April, a time when even many ephemeral streams in the Santa Monica Mountains still have water, so the stream at Gillette Ranch is likely wet only briefly in most years. Pacific treefrogs (*Hyla regilla*) are very flexible in their habitat use, however, and they will likely breed in the stream in years when water is present for a sufficient period. Other stream-breeding amphibians in the area such as California newts (*Taricha torosa*) and California treefrogs (*Hyla cadaverina*) are not likely to breed or be present in the stream, since they are generally more habitat-specific and prefer higher gradient streams with pools and a rock substrate (Stebbins 1985, Riley et al. 2005). Western toads prefer low gradient streams, such as the Gillette stream, and can successfully breed and metamorphose in relatively ephemeral pools or streams. Toads could potentially breed in some years in certain areas within the Ranch area, although they were not observed. As long as project activities occur away from the stream, these aquatic amphibians should not be affected.

There are also terrestrial salamander species that are likely present in the area, specifically blackbellied salamanders, *Batrachoseps nigriventris* and potentially ensatina, *Ensatina eschoscholtzii*, and arboreal salamanders, *Aneides lugubris*. These species were not detected during the surveys, however, they would more likely be detected in the winter or early spring, especially after a rain event. In the Santa Monica Mountains, terrestrial salamanders are often associated with oak woodlands, so if oak trees (*Quercus spp.*) and the oak woodland areas are avoided during project activities, effects should be minimal.

Another endangered species that historically occurred in the Malibu Creek Watershed is the southern steelhead trout (*Oncoryhynchus mykiss*). Currently, there is no suitable habitat for this species on the Gillette Ranch property because the drainages that do exist are too ephemeral to provide consistently appropriate habitat. Consequently, there will be no impacts to this species resulting from the proposed project alternatives.

<u>References</u>

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X = species observed at Gillette Ranch, 2007-2010, monthly birdwalks, Jack Gillooly, Steve Botts

GREBES **Pied-billed** Grebe CORMORANTS L Double-crested Cormorant BITTERNS, HERONS & EGRETS 🗶 Great Blue Heron Great Egret Snowy Egret 🔔 Green Heron Black-crowned Night-Heron SWANS, GEESE & DUCKS Greater White-fronted Goose X Canada Goose Wood Duck Green-winged Teal X Mallard _ Northern Pintail Blue-winged Teal Cinnamon Teal __ Gadwall _ Eurasian Wigeon American Wigeon Canvasback X Ring-necked Duck Lesser Scaup Bufflehead 🗶 Hooded Merganser **Red-breasted Merganser** Ruddy Duck AMERICAN VULTURES X Turkey Vulture California Condor KITES, EAGLES, HAWKS & ALLIES Osprey White-tailed Kite Northern Harrier Sharp-shinned Hawk Cooper's Hawk X Red-shouldered Hawk Zone-tailed Hawk X Red-tailed Hawk ____ Ferruginous Hawk Golden Eagle CARACARAS & FALCONS <u>X</u> American Kestrel Merlin Peregrine Falcon Prairie Falcon PARTRIDGES, GROUSE, TURKEYS & QUAIL 🗶 California Quail Mountain Quail RAILS, GALLINULES & COOTS Virginia Rail Sora Common Moorhen X American Coot PLOVERS & LAPWINGS 🐛 Killdeer SANDPIPERS, PHALAROPES & ALLIES **Greater** Yellowlegs Solitary Sandpiper

BIRDS OF MALIBU CREEK STATE PARK 1990 - 2007

X Spotted Sandpiper Long-billed Dowitcher Wilson's Snipe SKUAS, GULLS, TERNS & SKIMMERS X Ring-billed Gull California Gull Western Gull Gull sp PIGEONS & DOVES Rock Dove **Band-tailed** Pigeon Spotted Dove X_ Mourning Dove LORIES, PARAKEETS, MACAWS & PARROTS **Red-crowned Parrot** X Black-hooded Parakeet **BARN OWLS** Barn Owl TYPICAL OWLS Great Horned Owl SWIFTS Black Swift Vaux's Swift _ White-throated Swift HUMMINGBIRDS 📙 Black-chinned Hummingbird X Anna's Hummingbird Costa's Hummingbird **Rufous Hummingbird** X_ Allen's Hummingbird Selasphorus Sp KINGFISHERS Belted Kingfisher WOODPECKERS & ALLIES Lewis' Woodpecker X Acorn Woodpecker Red-naped Sapsucker Red-breasted Sapsucker Nuttall's Woodpecker Downy Woodpecker Hairy Woodpecker Northern Flicker TYRANT FLYCATCHERS X Olive-sided Flycatcher Western Wood-Pewee Willow Flycatcher Gray Flycatcher Pacific-slope Flycatcher Black Phoebe Eastern Phoebe Say's Phoebe Ash-throated Flycatcher Cassin's Kingbird Western Kingbird Eastern Kingbird SWALLOWS Tree Swallow Violet-green Swallow Northern Rough-winged Swallow **Cliff Swallow** Barn Swallow

JAYS, MAGPIES & CROWS _ Western Scrub Jay American Crow X Common Raven TITMICE X Oak Titmouse LONG-TAILED TITS & BUSHTITS 🗙 Bushtit NUTHATCHES X White-breasted Nuthatch **WRENS Rock Wren** Canyon Wren Bewick's Wren 🗶 House Wren Marsh Wren MUSCICAPIDS _ Golden-crowned Kinglet X Ruby-crowned Kinglet Blue-gray Gnatcatcher 🗶 Western Bluebird _ Mountain Bluebird Swainson's Thrush Hermit Thrush 🗶 American Robin Varied Thrush <u> X</u> Wrentit MOCKINGBIRDS, THRASHERS & ALLIES X Northern Mockingbird Sage Thrasher X_ California Thrasher WAGTAILS & PIPITS American Pipit WAXWINGS X. Cedar Waxwing SILKY-FLYCATCHERS 🗶 Phainopepla SHRIKES Loggerhead Shrike STARLINGS & ALLIES **X** European Starling VIREOS Plumbeous Vireo Cassin's Vireo 🗶 Hutton's Vireo Warbling Vireo EMBERIZIDS X Orange-crowned Warbler Nashville Warbler Northern Parula X Yellow Warbler Chestnut-sided Warbler X Yellow-rumped Warbler Black-throated Gray Warbler Townsend's Warbler **Common Yellowthroat** Wilson's Warbler Yellow-breasted Chat Summer Tanager Western Tanager Black-headed Grosbeak Blue Grosbeak

	Lazuli Bunting
	Indigo Bunting
<u>×</u>	Spotted Towhee
X	California Towhee
	Rufous-crowned Sparrow
X	Chipping Sparrow
	Vesper Sparrow
X	Lark Sparrow
	Savannah Sparrow
	Grasshopper Sparrow
	Le Conte's Sparrow
	Fox Sparrow
X	Song Sparrow
	Lincoln's Sparrow
	White-throated Sparrow
X	Golden-crowned Sparrow
<u>X</u>	White-crowned Sparrow
X	Dark-eyed Junco
Х.	Red-winged Blackbird
	Tricolored Blackbird
<u>Х</u>	Western Meadowlark
	Yellow-headed Blackbird
	Brewer's Blackbird
	Great-tailed Grackle
X	Brown-headed Cowbird
X	Hooded Oriole
X.	Bullock's Oriole
NC	DRTHERN FINCHES &
HONE	EYCREEPERS
X	Purple Finch
X	House Finch
	Pine Siskin
X.	Lesser Goldfinch
X	Lawrence's Goldfinch
X	American Goldfinch
ÕL	D WORLD SPARROWS
	House Sparrow

Date:	

Observers:

Number of Species:

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National Park Service - Santa Monica Mountains National Recreation Area Division of Planning, Science and Resource Management

Rare, Threatened, and Endangered Animals

Potentially Occurring in the Santa Monica Mountains and Simi Hills Potential Presence at King Gillette Ranch - Visitor Center Project Planning Area

	Species	Common Name	Status Codes ¹	Presence at Project Planning Area
	Mammals:			
1	Antrozous pallidus	Pallid Bat	FSC, SSC	Р
2	Euderma maculatum	Spotted Bat	FSC, SSC	Ν
3	Eumops perotis californicus	Greater Western Mastiff Bat	FSC, SSC	Ν
4	Macrotus californicus	California Leaf-nosed Bat	FSC, SSC	Ν
5	Myotis lucifugus occultus	Occult Little Brown Bat	FSC, SSC	Ν
	Plecotus townsendii townsendii	Pacific Western Big-eared Bat	FSC, SSC	Ν
7	Sorex ornatus salicornicus	Salt Marsh Ornate Shrew	FSC, SSC	Ν
8	Reithrodontomys megalotus limicola	Southern Marsh Harvest Mouse	(C3)	Ν
	Lasirus cinerus	Hoary Bat	PSC	Р
10	Taxidea taxus	American Badger	PSC	Ν
11	Felis concolor	Mountain Lion	PSC	Ν
12	Bassariscus astutus	Ringtail	PSC	Ν
	Mustela frenata	Longtail Weasel	PSC	Ν
	Neotoma lepida intermedia	Coastal Desert Woodrat	PSC	Ν
	Birds:			
15	Gymnogyps californianus	California Condor	FE, SE, LE	Ν
16	Pelacanus occidentalis californicus	Brown Pelican	FE, SE	Ν
17	Falco peregrinus anatum	Peregrine Falcon	FE, SE	Р
	Rallus longirostris levipes	Light-footed Clapper Rail	FE, SE	Ν
19	Sterna antillarum browni	California Least Tern	FE, SE	Ν
20	Empidonax traillii extrimus	Southwestern Willow Flycatcher	FE, SE	Р
21	Vireo belli pusillus	Least's Bell Vireo	FE, SE	Ν
	Haliaeetus leucocephalus	Bald Eagle	FT, SE	Ν
23	Charadrius alexandrius nivosus	Western Snowy Plover	FT, SSC	Ν
24	Polioptila Californica	California Gnatcatcher	FT, SSC	Ν
	Passerculus sandwihensis beldingi	Belding's Savannah Sparrow	FSC, SSC	Ν
	Ixobrychus exilis hersperis	Western Least Bittern	FSC, SSC	Ν
	Sterna elegans	Elegant Tern	FSC, SSC	Ν
	Eremophila alpestris actia	California Horned Lark	FSC, SSC	Ν
	Campylorhynchus brunneicapillus cousei	San Diego (Coastal) Cactus Wren	FSC, SSC	Ν
30	Lanius Iudovicianus	Loggerhead Shrike	FSC, SSC	Р
31	Agelaius tricolor	Tri-colored Blackbird	FSC, SSC	Ν
	Aimophial ruficeps canescens	Southern California Rufous-crowned Sparr		Р
	Oreotyx pictus	Mountain Quail	FSC	Р
	Numemius americanus	Long-billed Curlew	(C3), SSC	Ν
	Riparia riparia	Bank Swallow	ST	Ν
	Aquila chrysaetos	Golden Eagle	SSC	Р
	Accipiter cooperii	Cooper's Hawk	SSC	Y
	Circus cyaneus	Northern Harrier	SSC	Р
	Pandion haliaetus	Osprey	SSC	P
	Falco columabarius	Merlin	SSC	P
	Falco mexicanus	Prairie Falcon	SSC	P
	Asio otus	Long-eared owl	SSC	N

Rare, Threatened, and Endangered Animals

Potentially Occurring in the Santa Monica Mountains and Simi Hills

Potential Presence at King Gillette Ranch - Visitor Center Project Planning Area

Species		Common Name	Status Codes¹	Presence at Project Planning Area
43 Athene cuni	inularia	Burrowing owl	SSC	Ν
44 Dendrocia p		Yellow Warbler	SSC	Ŷ
45 Ammodram		Grasshopper Sparrow	PSC	P
46 Accipiter str		Sharp-shinned Hawk	PSC	P
47 Buteo lineat		Red-shouldered Hawk	PSC	Ŷ
48 Buteo regali		Ferruginous Hawk	PSC	Р
49 Elanus Cael		White-Tailed Kite	PSC	Р
50 Porzana car	rolina	Sora Rail	PSC	Р
51 Charadrius	montanus	Mountain Plover	PSC	Ν
52 Amphispiza	belli	Bell's Sage Sparrow	PSC	Ν
53 Icteria viren		Yellow-breasted Chat	PSC	Р
54 Coccyzus al		Yellow-billed Cuckoo	PSC	N
55 Gavia imme		Common Loon	PSC	N
56 Plegadis chi		White-faced Ibis	PSC	N
57 Phalacrocor		Double-crested Cormorant	PSC	Y
58 Cathartes a		Turkey Vulture	PSC	Ý
59 Buteo jamai		Red-tailed Hawk	PSC	Y
60 Falco sparve		American Kestrel	PSC	۱ ۲
61 Tyto alba	enus	Barn Owl	PSC	P
62 Bubo virgini	anus	Great-horned Owl	PSC	P
63 Otus kennic		Western Screech Owl	PSC	P
64 Asio flamme		Short-eared Owl	PSC	N
<u>Reptiles:</u>				
65 Clemmy's r	namorata pallida	Southwestern Pond Turtle	FSC, SSC	Р
66 Phrynosoma	a coronatum	Coast Horned Lizard	FSC, SSC	Ν
67 Lampropeltu	us zonata pulchra	San Diego Mountain Kingsnake	FSC, SSC	Р
68 Salvadora h	exalepis vigultea	Coast Patch-nosed Snake	FSC, SSC	Ν
69 Cnemidoph	orus tigris multiscutatus	Coastal Western Whiptail	FSC	Ν
70 Diadophis p	unctatus modestus	San Bernardino Ringneck Snake	FSC	Р
71 Thamnophis	s hammondii	Two-striped Garter Snake	FSC	Р
72 Anniella pul		Silvery Legless Lizard	SSC	Р
73 Hypsiglena		Night Snake	PSC	Ν
,, ,	on biscutatus vandenburghi	California Lyre Snake	PSC	Ν
, 75 Leptotyphlo	-	Western Blind Snake	PSC	Р
76 Eumeces sk		Western Skink	PSC	Р
Amphibian	<u>s:</u>			
77 Bufo micros	caphus californicus	Arroyo Southwestern Toad	FE, SSC	Ν
78 Rana aurora		California Red-legged Frog	FT, SSC	Ν
79 Taricha toro		Coast Range Newt	SSC	Ν
80 Ensatina es		Ensatina	PSC	P
81 Aneides lug		Arboreal Salamander	PSC	P
82 Hyla cadave		California Tree Frog	PSC	N
Fishes:				

Rare, Threatened, and Endangered Animals

Potentially Occurring in the Santa Monica Mountains and Simi Hills

Potential Presence at King Gillette Ranch - Visitor Center Project Planning Area

Species	Common Name	Status Codes¹	Presence at Project Planning Area
84 Oncoryhynchus mykiss	Southern California Steelhead Trout	FE	Ν
85 Gila orcutti	Arroyo Chub	PSC	Ν
86 Lampetra tridenta	Pacific Lamprey	PSC	Ν
Invertebrates:			
87 Euphydryas editha quino	Wright's Checkerspot Butterfly	FE, LE	Ν
88 Steptocephalus wootoni	Riverside Fairy Shrimp	FE	Ν
89 Lycaena arota nubila	Clouded Tailed Copper Butterfly	FSC	Ν
90 Panoquina errans	Salt Marsh Skipper	FSC	Ν
91 Satyrium auretorum fumosum	Santa Monica Mountains Hairstreak	FSC	Ν
92 Brennania belkini	Belkins Dune Tabanid Fly	FSC	Ν
93 Neduba longipennis	Santa Monica Shieldback Katydid	FSC	Ν
94 Neduba diminuitiva dactyla	Santa Monica Shieldback Katydid	FSC	Ν
95 Neduba diminuitiva malibu	Santa Monica Shieldback Katydid	FSC	Ν
96 Neduba morsei costalis	Santa Monica Shieldback Katydid	FSC	Ν
97 Neduba morsei curtatus	Santa Monica Shieldback Katydid	FSC	Ν
98 Neduba morsei tectinota	Santa Monica Shieldback Katydid	FSC	Ν
99 Proceratium californicum	Valley Oak Ant	FSC	Ν
100 Speyeria callippe comstocki	Comstock's Fritillary	PSC	Ν
101 Lycaena gorgon	Gorgon Copper	PSC	Ν
102 Coleus globosus	Globose Dune Beetle	PSC	Ν
103 Melanopolus obespolus		PSC	Ν
104 Ceuthophilus hesperus eino		PSC	Ν
105 Arenivaga spp.		PSC	Ν
106 Trimerotropis occidentaloides	Santa Monica Mountains Grasshopper	PSC	Ν
107 Timena monikensis	Walking Stick	PSC	Ν

1. Status Codes

Federal

FE: Federal Endangered FT: Federal Threatened FPE: Federal Proposed for listing as Endangered FPT: Federal Proposed for listing as Threatened FSC: Federal Species of Concern (C3) = Former Category 3

State

SE: State Endangered ST: State Threatened SCE: State Candidate Endangered SCT: State Candidate Threatened SSC: Dept. of Fish and Game species of concern

Park

PSC = Park Species of Concern LE = Believed Locally Extinct/Extirpated

Presence at Project Planning Area

- During NPS 2007 Survey
- Y = Yes, observed
- N = No, not observed
- P = Not observed, but
- potentially present

National Park Service - Santa Monica Mountains National Recreation Area Division of Planning, Science and Resource Management

Rare, Threatened, and Endangered Plants

Potentially Occurring in the Santa Monica Mountains and Simi Hills Potential Presence at King Gillette Ranch - Visitor Center Project Planning Area

				Presence at Project
	Species	Common Name	Status Codes ¹	Planning Area
Sens	sitive Plant Species in the Santa Monica Moun	tains - Simi Hills Area		
1	Astragalus pychostachyus var. lanosissimus	Ventura marsh milk-vetch	FE, SE, 1B	Ν
2	Astragalus tener var. titi	coastal dunes milk-vetch	FE, SE, 1B, LE	Ν
3	Cordylanthus maritimus ssp. maritimus	salt marsh bird's-beak	FE, SE, 1B	Ν
	Pentachaeta Iyonii ²	Lyon's pentacheata	FE, SE, 1B	Ν
5	Astragalus brauntonii ³	Braunton's milk-vetch	FE, 1B	Ν
6	Chorizanthe parryi var. fernandina⁵	San Fernando Valley spineflower	FPE, SCE, 1B	Ν
	Deinandra minthornii ²	Santa Susana tarplant	FSC, SR, 1B	Ν
8	Dithyrea maritima	beach spectaclepod	FSC, ST, 1B, LE	Ν
	Dudleya cymosa ssp. marcescens ²	marcescent dudleya	FT, SR, 1B	Ν
	Dudleya cymosa ssp. agourensis ²	Santa Monica Mtns. dudleya	FT, 1B	Ν
	Dudleya cymosa ssp. ovatifolia ³	Santa Monica Mtns. dudleya	FT, 1B	Ν
	Dudleya parva ²	Conejo dudleya	FT, 1B	Ν
	Dudleya verityi ²	Verity's dudleya	FT, 1B	Ν
	Eriogonum crocatum ²	Conejo buckwheat	FSC, SR, 1B	Ν
	Delphinium parryi ssp. blochmaniae	dune larkspur	FSC, 1B	N
	Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	FSC, 1B	N
	Dudleya multicaulis	many-stemmed dudleya	FSC, 1B	N
	Lasthenia glabrata var. coulteri	Coulter's goldfields	FSC, 1B	N
	Nolina cismontana	California beargrass	FSC, 1B	N
-	Calochortus plummerae	Plummer's mariposa lily	1B	N
	Amorpha californica var. californica	false indigo	1B	N
	Atriplex coulteri	Coulter's saltbush	1B	N
	Baccharis malibuensis ²	Malibu baccharis	1B	N
-	Platystemon californicus	cream cups	1B	N
	Suaeda esteroa	estuary seablite	1B	N
	Ericameria palmeri var. pachylepis	Palmer's goldenbush	2	N
	Nama stenocarpum	mud nama	2	N
	Senecio aphanactis		2	N
	Thelypteris puberula var. sonorensis	rayless ragwort Sonoran maiden fern	2	N
	Chorizanthe parryi var. parryi		FSC, 3	N
	Camissonia lewisii	Parry's Spineflower		
	Hordeum intercedens	Lewis's evening-primrose vernal barley	3 3	N
-	Abronia maritima	red sand-verbena	4	N N
			4	
	Asplenium vespertinum	western spleenwort		N N
	Baccharis plummerae ssp. plummerae Calandrinia breweri	Plummer's baccharis Brewer's calandrinia	4	
			4, LA	N
	Calandrinia maritima	Seaside calandrinia	4	N
	Calochortus catalinae Cercocarpus betuloides var. blancheae ⁴	Santa Catalina mariposa lily	4	N
	•	island mountain-mahogony	4	N
	Chamaebatia australis	southern mountain misery	4	N
	Chorizanthe wheeleri	Wheeler's spineflower	4	N
	Convolvulus simulans	small flowered morining glory	4	N
-				N N
-	Dichondra occidentalis Erysimum insulare ssp. suffrutescens	western dichondra suffretescent wallflower	4 4	

Rare, Threatened, and Endangered Plants Potentially Occurring in the Santa Monica Mountains and Simi Hills Potential Presence at King Gillette Ranch - Visitor Center Project Planning Area

			Presence at Project
Species	Common Name	Status Codes ¹	Planning Area
45 Galium cliftonsmithii	Santa Barbara bedstraw	4	Ν
46 Juglans californica var. californica	Southern California black walnut	4, LA	Ν
47 Juncus acutus ssp. leopoldii	southwestern spiny rush	4	Ν
48 Lepechinia fragrans	fragrant pitcher sage	4	Ν
49 <i>Lilium humboldtii</i> ssp. ocellatum	Humbolt lily	4, LA	Ν
50 Lycium californicum	Cal. desert thorn, Cal. boxthorn	4	Ν
51 Microseris douglasii ssp. platycarpha	microseris	4	Ν
52 Mucronea californica	California spineflower	4, LE	Ν
53 Muhlenbergia californica	California muhly	4, LE	Ν
54 Nicotiana quadrivalvis	Indian tobacco	4	Р
55 Polygala cornuta var. fishiae	Fish's milkwort	4	Ν
56 Suaeda taxifolia	California sea blite	4	Ν

1. Status Codes

Federal

FE: Federal Endangered FT: Federal Threatened FPE: Federal Proposed for listing as Endangered FPT: Federal Proposed for listing as Threatened FSC: Federal Species of Concern

State

SE: State Endangered ST: State Threatened SR: State Rare SCE: State Candidate Endangered SCT: State Candidate Threatened

CNPS

1A: Presumed extinct in CA.

- 1B: Rare of endangered in California or elsewhere.
- 2: Rare of endangered in California, more common elsewhere
- 3: Plants for which we need more information- Review List
- 4: Plants of limited distribution- Watch List

Region

LA: Locally Abundant LE: Believed Locally Extinct/Extirpated

2 Endemic to the Santa Monica Mountains and Simi Hills area.

- 3 Major occurrence in SMM-SH area, there are a few occurrences outside area.
- 4 Only mainland occurrence.
- 5 Formerly presumed extinct. A population was discovered in 1998.

Presence at Project Planning Area

During NPS 2007 Survey N = No, not observed

P = No observed, but potentially present

Rare, Threatened, and Endangered Plants Potentially Occurring in the Santa Monica Mountains and Simi Hills Potential Presence at King Gillette Ranch - Visitor Center Project Planning Area

			Presence at
			Project
Species	Common Name	Status Codes ¹	Planning Area

Plant Species That Are Uncommon in the Santa Monica Mountains - Simi Hills Area but Common Elsewhere

1 Brodiaea jolonensis	wild brodiaea
2 Camissonia boothii ssp. decorticans	shredding evening primrose
3 Carex globosa	sedge
4 Carex spissa	sedge
5 Cheilanthes cooperae	Cooper's lace fern
6 Cheilanthes covillei	Coville's lace fern
7 Cheilanthes newberryi	lace fern
8 Collinsia parryi	blue-eyed Mary
9 Eriogonum angulosum	buckwheat
10 Eriogonum wrightii var. membranaceum	Wright's buckwheat
11 Juncus rugulosus	wrinkled rush
12 Juniperus californica	California juniper
13 Koeleria macrantha [K. cristata]	Junegrass
14 Lewisia rediviva	bitter root
15 Notholaena californica	California cloak fern
16 Opuntia basilaris var. basilaris	beavertail cactus
17 Orobanche uniflora	naked broom-rape
18 Quercus douglasii	blue oak
19 Salix goodingii	Gooding's black willow
20 Sarcostemma cynanchoides ssp. hartwegii	climbing milkweed
21 Silene verecunda ssp. platyota	Dolores campion
22 Stanleya pinnata	prince's plume
23 Woodwardia fimbriata	giant chain fern
	giant onan ion

APPENDIX F

Consultation with Natural Resources Conservation Service Regarding Prime and Unique Farmland Soils

for Anthony C. Beilenson Visitor Center at King Gillette Ranch Environmental Assessment

> Letter from NPS to NRCS, February 2, 2010 Response Letter fron NRCS to NPS, February 4, 2010 Form AD-1006, Farmland Conversion Impact Rating Project Vicinity Map Project Planning Area Map Soils Map for Project Area



United States Department of the Interior

NATIONAL PARK SERVICE Santa Monica Mountains National Recreation Area 401 West Hillcrest Drive Thousand Oaks, California 91360-4207

In reply refer to: L76 (SAMO/126-72)

February 2, 2010

Mr. Brooks Engelhardt, District Conservationist USDA, Natural Resources Conservation Service P.O. Box 260 Somis, CA 93066

Subject: Proposed Anthony C. Beilenson Visitor Center at King Gillette Ranch Farmland Protection Policy Act Compliance Form AD-1006: Farmland Conversion Impact Rating

Dear Mr. Engelhardt:

The National Park Service is preparing an Environmental Assessment for a proposed centrally located, full-service visitor center at King Gillette Ranch within the Santa Monica Mountains National Recreation Area. Approximately two one-half acre areas within the visitor center project's proposed planning area may be converted from vacant field into stormwater drainage collection and conveyance infrastructure. The proposed use would permanently alter the status of the land. We request your evaluation of the potential for prime farmland conversion at the proposed building site. For your review, we have enclosed three copies the Farmland Conversion Impact Rating Form AD-1006 with Parts I and III filled in by the National Park Service. We have also enclosed location maps for each copy.

Tentative analysis of the site indicates the stormwater drainage structures would occur within two areas, totalling six acres, designated in the *Soil Survey of the Santa Monica Mountains National Recreation Area, California* (2007) as Botella loam (Map Unit 320). Table 6 in the survey includes Botella loam on 2-9% slopes as prime farmland, if irrigated. The subject fields were irrigated for agricultural purposes in the 1930s to the mid-1950s, when landowners King Camp Gillette, and then movie director Clarence Brown, grew hay, grazed livestock, and produced fruit from orchards. Subsequent landowners did not continue agriculture land use. The fields have not been irrigated for agricultural use since the mid-1950s. From 1998 to 2009, Las Virgenes Municipal Water District used the fields to dispose of excess treated water from their Tapia Water Reclamation Facility per conditions of the Los Angeles Regional Water Quality Control Board prohibiting discharge from the facility into Malibu Creek during the low flow season (April through November). The property was purchased by the State of California and the National Park Service for public parkland in 2005. The proposed visitor center project does not include any plans for new land use on the vacant fields other than the stormwater drainage structures.

Thank you for your determination as to whether the proposed project site contains prime, unique, statewide or locally important farmland. If you have questions, please call Melanie Beck, Outdoor Recreation Planner, at (805)370-2346.

Sincerely,

Hourse U. Jong Woody Smeck

Superintendent

Enclosures Form AD-1006, Farmland Conversion Impact Rating Project Vicinity Map Project Plan Soils Map for Project Site



February 4, 2010

National Park Service Santa Monica Mountains National Recreation Area 401 West Hillcrest Drive Thousand Oaks, CA 91360-4207

Dear Mr. Smeck:

Please find enclosed a copy of the following:

- 1) Form AD-1006, Farmland Conversion Impact Rating
- 2) Soils Map for Project Area
- 3) Documentation for Parts IV and V of the AD-1006 form.

AD-1006 Documentation for Parts IV and V

Anthony C Beilenson Visitor Center at King Gillette Ranch

Soil Symbol	Category	Acres	Storie Index	Weighted Average
Botella	Prime	11.5	92	1058
	(not irrigated)			
	TOTALS:	11.5		1058

Part IV C: Acres to be converted/acres farmland in county x 100 = 11.5/124,959 x 100 = 0.00009

Part V: Relative Value of Farmland: 1058/11.5 = 92

Once you have completed Part VII of the AD-1006 and your agency has made a final decision on the project, please return a copy of this form to the Natural Resources Conservation Service office listed above.

If you have any questions, please feel free to contact me at 805-386-4489 x101.

Sincerely,

roles EEngehard

Brooks Engelhardt District Conservationist USDA-NRCS

* Returned to NRES February 11, 2010

Helping People Help the Land An Equal Opportunity Provider and Employer

U.S. Department of Agriculture FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)			Date Of Land Evaluation Request 1/14/10						
Name Of Project Anthony C. Beilenson Visitor Center at King Gillette Ranch			Federal Agency Involved National Park Service						
Proposed Land Use S M Mtns Natl Rec Area Visitor-Serving Gateway Visitor Center			County And State Los Angeles County, CA						
PART II (To be completed by NRCS)		Date Requ	est Received By	/ NRC	s				
Does the site contain prime, unique, statewide or local important fa (If no, the FPPA does not apply do not complete additional part			miand? Yes No of this form).		Acres Irrigate				
Major Crop(s) Farmable Land In CLANUE Acres: 113, 8		62 9.6%			Amount Of F Acres: \2	armland As De 4,959	efined in FPPA		
Name Of Land Evaluation System Used	Name Of Local Site A	Assessment 8	System		Date Land E	valuation Retu	med By NRCS		
PART III (To be completed by Federal Agency	/)	7				Site Rating			
A. Total Acres To Be Converted Directly	,		Site A		Site B	Site C	Site D		
B. Total Acres To Be Converted Directly			0.5			1			
C. Total Acres In Site			11.5	0.	0	0.0	0.0		
PART IV (To be completed by NRCS) Land I	Evaluation Information		11.0		<u> </u>	0.0			
						<u> </u>			
A. Total Acres Prime And Unique Farmlar	and the second		2.11	.	· · · · · · · · · · · · · · · · ·	<u> </u>			
B. Total Acres Statewide And Local Impor			ADUST			h			
C. Percentage Of Farmland in County Or			0.00009						
D. Percentage Of Familand In Govt. Jurisdiction PART V (To be completed by NRCS) Land E Relative Value Of Farmland To Be Co		° 92	0		0	0			
PART VI (To be completed by Federal Agenc Site Assessment Criteria (These criteria are explaine		Maximum Points							
1. Area In Nonurban Use		15	15						
		10	10						
2 Perimeter in Nonurban Lice									
2. Perimeter In Nonurban Use									
3. Percent Of Site Being Farmed	2	20	(
 Percent Of Site Being Farmed Protection Provided By State And Loca 	2 I Government 2	20 20	0 20						
 Percent Of Site Being Farmed Protection Provided By State And Loca Distance From Urban Builtup Area 	I Government 2	20 20 15	(
 Percent Of Site Being Farmed Protection Provided By State And Loca Distance From Urban Builtup Area Distance To Urban Support Services 	I Government 2 1 Government 1	20 20 15 15	0 20						
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 Percent Of Site Being Farmed Protection Provided By State And Loca Distance From Urban Builtup Area Distance To Urban Support Services Size Of Present Farm Unit Compared 1 Creation Of Nonfarmable Farmland Availability Of Farm Support Services On-Farm Investments Effects Of Conversion On Farm Suppo Compatibility With Existing Agricultural TOTAL SITE ASSESSMENT POINTS 	I Government 2 I Government 2 To Average 1 To Average 1	20 20 15 15 10 10 5 20 10 10 10 160							
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Site is in the Santa Monica Mountains on area not used for crop production like other areas of the NRCS jurisdiction in the subject region.
Site has not been used for irrigated agricultural group production since 1952.
Most of the site (11.5 acres) will remain undeveloped and the fields will retain their pastoral setting as open space.

Anthony C. Beilenson Visitor Center at King Gillette Ranch Santa Monica Mountains National Recreation Area National Park Service **Project Vicinity Map**

