

**Environmental Assessment for the  
Implementation of the Privatization of Army Lodging Program at  
Fort Hunter Liggett, California**



*Prepared for*

**Commander, Fort Hunter Liggett, California**

*Prepared by*

**US Army Corps of Engineers, Mobile District**

*With technical assistance from*

Tetra Tech, Inc.  
Oakland, CA

**December 2012**

## ***ENVIRONMENTAL ASSESSMENT ORGANIZATION***

This environmental assessment (EA) addresses the proposed action to implement the Privatization of Army Lodging (PAL) Program at Fort Hunter Liggett, California. It has been developed in accordance with the National Environmental Policy Act and implementing regulations issued by the Council on Environmental Quality (Title 40 of the *Code of Federal Regulations* [CFR] Parts 1500–1508) and the Army (32 CFR Part 651). Its purpose is to inform decision makers and the public of the likely environmental and socioeconomic consequences of the Preferred Alternative and other alternatives.

An ***EXECUTIVE SUMMARY*** briefly describes the proposed action, environmental and socioeconomic consequences, and mitigation measures.

***SECTION 1.0: PURPOSE, NEED, AND SCOPE*** summarizes the purpose of and need for the proposed action and describes the scope of the environmental impact analysis process.

***SECTION 2.0: PROPOSED ACTION AND ALTERNATIVES*** describes the proposed action to implement the PAL Program at Fort Hunter Liggett and examines alternatives to implementing the proposed action including a Preferred Alternative and a No Action Alternative.

***SECTION 3.0: AFFECTED ENVIRONMENT AND CONSEQUENCES*** describes the existing environmental and socioeconomic setting at Fort Hunter Liggett and identifies potential effects of implementing the Preferred Alternative and the No Action Alternative.

***SECTION 4.0: FINDINGS*** summarizes the environmental and socioeconomic effects of implementing the Preferred Alternative and the No Action Alternative.

***SECTION 5.0: REFERENCES AND PERSONS CONSULTED*** provides bibliographical information for cited sources and a listing of persons and agencies consulted during preparation of this EA.

***SECTION 6.0: LIST OF PREPARERS*** identifies the persons who prepared the document.

***SECTION 7.0: DISTRIBUTION LIST*** lists recipients of this EA.

***APPENDICES***

- A*** Record of Non-Applicability
- B*** Economic Impact Forecast System

An ***ACRONYMS AND ABBREVIATIONS*** list is at the end of the document.



**ENVIRONMENTAL ASSESSMENT  
IMPLEMENTATION OF THE PRIVATIZATION OF ARMY LODGING PROGRAM  
AT FORT HUNTER LIGGETT, CALIFORNIA**

*Prepared by:*

**MOBILE DISTRICT  
US ARMY CORPS OF ENGINEERS**



**STEVEN J. ROEMHILDT  
Colonel, Corps of Engineers  
Commanding**

*Approved by:*

**US ARMY GARRISON, FORT HUNTER LIGGETT**

---

**DONNA R. WILLIAMS  
Colonel, US Army  
Commander**

**October 2012**

**ENVIRONMENTAL ASSESSMENT  
IMPLEMENTATION OF THE PRIVATIZATION OF ARMY LODGING PROGRAM  
AT FORT HUNTER LIGGETT, CALIFORNIA**

*Prepared by:*

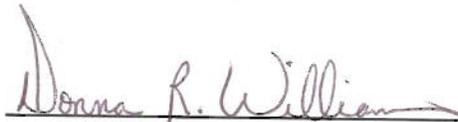
**MOBILE DISTRICT  
US ARMY CORPS OF ENGINEERS**

---

**STEVEN J. ROEMHILDT  
Colonel, Corps of Engineers  
Commanding**

*Approved by:*

**US ARMY GARRISON, FORT HUNTER LIGGETT**

---

**DONNA R. WILLIAMS  
Colonel, US Army  
Commander**

**October 2012**

## ENVIRONMENTAL ASSESSMENT

**LEAD AGENCY:** US Army Garrison, Fort Hunter Liggett

**TITLE OF PROPOSED ACTION:** Implementation of the Privatization of Army Lodging Program at Fort Hunter Liggett, California

**AFFECTED JURISDICTION:** Fort Hunter Liggett, California

**PREPARED BY:** Steven J. Roemhildt, Colonel, US Army Corps of Engineers, Mobile District

**APPROVED BY:** Donna R. Williams, Colonel, US Army, US Army Garrison, Fort Hunter Liggett

**ABSTRACT:** This environmental assessment (EA) considers the proposed implementation of the Privatization of Army Lodging Program, including the transfer of lodging assets at Fort Hunter Liggett, California. The EA identifies, evaluates, and documents the effects of obtaining private sector funding for construction, maintenance, management, renovation, replacement, rehabilitation, and development of transient lodging facilities. This is the Army's Preferred Alternative. A No Action Alternative is also evaluated. Implementation of the Preferred Alternative is not expected to result in significant environmental impacts. Preparation of an environmental impact statement, therefore, is not required, and a finding of no significant impact (FNSI) will be published in accordance with Title 32 of the *Code of Federal Regulations* Part 651 (Environmental Effects of Army Actions) and the National Environmental Policy Act.

**REVIEW COMMENT DEADLINE:** The final EA and draft FNSI are available for review and comment for 30 days, beginning upon publication of a notice of availability. Copies of the EA and draft FNSI are available for review and comment at the following local libraries: Monterey County Free Libraries (King City and Buena Vista Branches), San Antonio School Library, and Fort Hunter Liggett Library. Comments on the EA and draft FNSI should be submitted to: Dir. of Public Works Env. Division (ATTN: Clark), 233 California Avenue, Fort Hunter Liggett, CA 93928-7090 or by electronic mail to [liz.r.clark@us.army.mil](mailto:liz.r.clark@us.army.mil). An electronic copy of the EA or FNSI can be requested by using this contact information or downloading from <http://www.liggett.army.mil/sites/dpw/enviromental.asp>. Comments on the EA and draft FNSI should be submitted no later than the end of the 30-day review period.

---

## **EXECUTIVE SUMMARY**

### **ES.1 BACKGROUND**

This environmental assessment (EA) evaluates the proposal of the Privatization of Army Lodging (PAL) at Fort Hunter Liggett, California.

### **ES.2 PROPOSED ACTION**

The Army proposes to transfer ownership and operation of its transient lodging facilities to a private-sector development company. Under the proposed action, the Army would execute a lease and supporting agreements negotiated with and approved by the Office of the Assistant Secretary of the Army for Installations and Environment. The Army would convey the existing lodging facility and lease the underlying land to its selected development partner, Lend Lease. Lend Lease formed a special-purpose entity, Rest Easy, LLC (Rest Easy) to execute the lease with Army as lessor and Rest Easy as lessee. Lend Lease would construct a new hotel, and InterContinental Hotels Group, its contracted hotelier, would manage the lodging operations. The Army would grant a 46-year lease of land for constructing a new hotel. Rest Easy would be expected to meet Fort Hunter Liggett's lodging requirements through operating and maintaining the existing facility and by renovating inadequate facilities and constructing new ones.

Implementing the PAL program at Fort Hunter Liggett would result in the conveyance of the existing lodging facility to Rest Easy for renovation for short-term use and construction of a new hotel. These actions would occur over about a 7-year initial development period, beginning in 2013, and provide a final inventory of 54 lodging units. Two optional project sites are under consideration for siting the new hotel; the new hotel would be constructed on one of the two sites being considered. The proposed action would improve the quality of life for Soldiers, their families, and other personnel eligible to use Army transient lodging.

### **ES.3 PURPOSE AND NEED**

The purpose of the proposed action is to transfer ownership and operation of transient lodging to the private sector. The proposed action is needed to provide affordable, quality transient lodging facilities to Soldiers and their families through a combination of new facilities and improvements to existing facilities to ensure that they meet current commercial standards for mid-scale hotels.

### **ES.4 ALTERNATIVES**

The Army identified four alternatives: the Preferred Alternative, renovation of the existing lodging facility, the reliance on the off-post hotel market alternative, and the No Action Alternative. Implementing the PAL program at Fort Hunter Liggett is the Army's Preferred Alternative. Under the Preferred Alternative, the Army would convey the existing lodging facility to Rest Easy, a private developer. The Army would grant the developer a 46-year lease of land for constructing a new hotel. Rest Easy would be expected to meet Fort Hunter Liggett's lodging requirements by renovating, operating, and maintaining the existing facility and constructing a new hotel. That would achieve the purpose of and need for the proposed action.

A No Action Alternative is evaluated in detail in this EA. The No Action Alternative is prescribed by the Council on Environmental Quality regulations to serve as the baseline against which the Preferred Alternative and other alternatives are analyzed.

One alternative to the Preferred Alternative that was considered is renovation of existing lodging facilities. The Army considered renovating Gibb Hall, the existing lodging facility, to meet the transient lodging needs of Soldiers, their dependents, and other authorized patrons. This would involve modifying the facility into a Holiday Inn Express, the minimum lodging standard under the PAL program. Due to the age, condition, and structure of Gibb Hall, the Army determined that rehabilitation was not economically viable. For this reason, this alternative is not feasible and is not evaluated in detail in this EA.

The other alternative to the Preferred Alternative that was considered is reliance on the off-post hotel market. In lieu of privatizing the function, the Army could get out of the lodging business, leaving Soldiers and other patrons to rely on off-post hotels and motels for similar services. The use of off-post lodging would lengthen Soldiers' workdays because of commuting and increase transportation costs. In some instances, Soldiers would encounter shortages of lodging in adjacent communities. Terminating the Army's lodging program at Fort Hunter Liggett would result in abandoning the existing lodging facility. The combination of the building standing idle until alternative uses could be determined and the time needed to achieve such uses would contravene the Army's policy to manage its resources to their optimal potential. For these reasons, the off-post hotel market alternative is not feasible and is not evaluated in detail in this EA.

## **ES.5 ENVIRONMENTAL CONSEQUENCES**

This EA evaluates potential short- and long-term effects on land use, aesthetics and visual resources, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomics (including environmental justice and protection of children), transportation, utilities, and hazardous and toxic substances.

Implementing the Preferred Alternative would be expected to have a mixture of short- and long-term minor adverse and beneficial effects on the environmental resources and conditions.

For each resource area, the predicted effects from the Preferred Alternative and the No Action Alternative are summarized in Table ES-1.

Mitigation measures would be implemented as part of the Preferred Alternative to ensure that adverse effects are minor or avoided. These measures are included in the impact analyses of several resource sections and in Table ES-2. The ground lease would include provisions to hold Rest Easy accountable for implementation of these measures. The lease would require Rest Easy to prepare an Environmental Management Plan that would be approved by the installation. Implementation of the Preferred Alternative would comply with all applicable laws, ordinances, and regulations.

## **ES.6 CONCLUSION**

On the basis of the EA, it has been determined that implementing the Preferred Alternative would have no significant adverse effects on the quality of human life or the natural environment. Preparation of an environmental impact statement is not required before implementing the Preferred Alternative.

**Table ES-1**  
**Summary of Potential Environmental and Socioeconomic Consequences**  
**Environmental and Socioeconomic Effects**

<b>Resource</b>	<b>Proposed Action (Preferred Alternative)</b>	<b>No Action Alternative</b>
Land use	Minor adverse	No effect
Aesthetics and visual resources	Minor adverse	No effect
Air quality	Minor adverse	No effect
Noise	Minor adverse	No effect
Geology and Soils	Short-term minor adverse, long-term no effect	No effect
Water resources	Minor adverse	No effect
Biological resources	Minor adverse	No effect
Cultural resources	Minor adverse	No effect
Socioeconomics	Short-term minor adverse, short- and long-term minor beneficial	No effect
Transportation	Minor adverse	No effect
Utilities	Minor adverse	No effect
Hazardous and toxic substances	Short-term minor adverse, long-term minor beneficial	No effect

**Table ES-2**  
**Mitigation Measures**

***Aesthetics and Visual Resources***

- Rest Easy would design, construct, and maintain the new hotel in accordance with the structures, facilities, and landscaping guidelines in the Army Installation Design Standards and the Fort Hunter Liggett Installation Design Guidelines.

***Air Quality***

- Rest Easy would implement construction best management practices to minimize fugitive dust such as applying water or other materials to dirt roads, material stockpiles, and other surfaces.

***Noise***

- Rest Easy would limit construction activities to normal weekday business hours to the extent practicable, and would muffle or shroud construction equipment if necessary.

***Geology and Soils***

- Rest Easy would employ best management practices to control runoff, erosion, and sedimentation.

***Water Resources***

- Rest Easy would obtain coverage under the National Pollutant Discharge Elimination System General Permit for Discharges from Construction Activities and would prepare and implement a stormwater pollution prevention plan.
- Rest Easy would comply with the post-construction stormwater management requirements mandated by Section 438 of the Energy Independence and Security Act.

***Biological Resources***

- Where vegetation could be disturbed by demolition and construction, Rest Easy would conduct surveys for nesting migratory birds before vegetation disturbance. Fort Hunter Liggett would evaluate the survey results and coordinate with Rest Easy to ensure construction activities would not have any adverse effects on migratory birds. Fort Hunter Liggett would closely monitor construction and development from March 1 to August 31 to avoid adverse effects on breeding migratory birds.

---

**Table ES-2**  
**Mitigation Measures**

---

- If any oak trees are impacted or removed, Rest Easy would replace them at a 3:1 ratio with the same species as seedlings or saplings that are at least 2 feet tall.
- 

***Cultural Resources***

- A provision would be included in the ground lease regarding "Accidental or Inadvertent Discoveries of Historic Properties." The lease provision would be based on Section 4.5.3 of the Fort Hunter Liggett Integrated Cultural Resources Management Plan.
  - Rest Easy would follow the design guidelines in the Fort Hunter Liggett Installation Design Guidelines and the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.
  - The Army and Rest Easy would conduct a formal evaluation of Gibb Hall to determine its eligibility for listing in the National Register of Historic Places prior to demolition of the building. If Gibb Hall is determined eligible, effects resulting from the Preferred Alternative would be addressed through Section 106 consultation with the California State Historic Preservation Office.
  - At Parcel C, the Army would consult with the State Historic Preservation Office to address impacts to the Mission San Antonio de Padua viewshed; mitigation measures, such as the use of buffer planting, would be proposed as necessary to minimize adverse effects.
  - At Parcel C, Rest Easy would follow guidance in the Installation Design Guidelines to create a buffer between the hotel and the Mission San Antonio de Padua, such as the use of buffer planting to screen the hotel from the Mission.
- 

***Socioeconomics and Environmental Justice***

- Rest Easy would place barriers around construction sites to prevent children from entering the site.
- 

***Transportation***

- Rest Easy would schedule and route construction vehicles to minimize conflicts with other traffic.
- 

***Hazardous and Toxic Substances***

- Rest Easy would be responsible for the proper handling, storage, use, transport, characterization, disposal, and cleanup of hazardous and toxic materials and waste and solid waste generated from the project.
  - Rest Easy would develop and implement a hazardous materials management plan, a hazardous waste management plan, and a site-specific health and safety plan. The plans would adhere to federal, state, and municipal laws, ordinances, and regulations and would detail relevant best management practices. The plans would specify response actions if unexpected contamination or munitions and explosives of concern were encountered on the project sites.
-

## CONTENTS

<b>SECTION 1.0</b>	<b>PURPOSE, NEED, AND SCOPE .....</b>	<b>1-1</b>
1.1	Introduction .....	1-1
1.2	Purpose and Need.....	1-2
1.3	Scope of Analysis.....	1-2
1.4	Public Involvement .....	1-2
1.5	Privatization Authorities .....	1-3
1.6	Environmental Laws and Regulations.....	1-3
<b>SECTION 2.0</b>	<b>PROPOSED ACTION AND ALTERNATIVES .....</b>	<b>2-1</b>
2.1	Introduction .....	2-1
2.2	No Action Alternative .....	2-1
2.3	Preferred Alternative .....	2-1
2.3.1	Description of Existing Lodging and Available Land .....	2-1
2.3.2	Proposed Lodging Actions .....	2-3
2.4	Alternatives Considered but Eliminated from Detailed Study .....	2-4
<b>SECTION 3.0</b>	<b>AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES .....</b>	<b>3-1</b>
3.1	Land Use .....	3-1
3.1.1	Affected Environment.....	3-1
3.1.2	Environmental Consequences .....	3-3
3.2	Aesthetics and visual resources.....	3-4
3.2.1	Affected Environment.....	3-4
3.2.2	Environmental Consequences .....	3-4
3.3	Air Quality.....	3-6
3.3.1	Affected Environment.....	3-6
3.3.2	Environmental Consequences .....	3-7
3.4	Noise .....	3-9
3.4.1	Affected Environment.....	3-9
3.4.2	Environmental Consequences .....	3-10
3.5	Geology and Soils .....	3-12
3.5.1	Affected Environment.....	3-12
3.5.2	Environmental Consequences .....	3-13
3.6	Water Resources.....	3-13
3.6.1	Affected Environment.....	3-13
3.6.2	Environmental Consequences .....	3-14
3.7	Biological Resources.....	3-17
3.7.1	Affected Environment.....	3-17
3.7.2	Environmental Consequences .....	3-19
3.8	Cultural Resources .....	3-20
3.8.1	Affected Environment.....	3-20
3.8.2	Environmental Consequences .....	3-22
3.9	Socioeconomics.....	3-28
3.9.1	Affected Environment.....	3-28
3.9.2	Environmental Consequences .....	3-30
3.10	Transportation .....	3-32

3.10.1 Affected Environment .....3-32  
3.10.2 Environmental Consequences .....3-33  
3.11 Utilities .....3-35  
3.11.1 Affected Environment .....3-35  
3.11.2 Environmental Consequences .....3-36  
3.12 Hazardous and Toxic Substances .....3-37  
3.12.1 Affected Environment .....3-37  
3.12.2 Environmental Consequences .....3-40  
3.13 Cumulative Effects .....3-40  
3.13.1 Cumulative Projects .....3-40  
3.13.2 Cumulative Effects Summary .....3-41  
3.14 Mitigation Summary .....3-43  
**SECTION 4.0 CONCLUSIONS.....4-1**  
**SECTION 5.0 REFERENCES AND PERSONS CONSULTED .....5-1**  
**SECTION 6.0 LIST OF PREPARERS .....6-1**  
**SECTION 7.0 DISTRIBUTION LIST .....7-1**

**Appendices**

Appendix A Record of Non-Applicability  
Appendix B Economic Impact Forecast System

**Tables**

1-1	Installations Participating in PAL by Group .....	1-1
2-1	Existing Lodging Facilities, Fort Hunter Liggett .....	2-2
2-2	Fort Hunter Liggett PAL Preferred Alternative .....	2-3
3-1	Annual Air Emissions Compared to Applicability Thresholds.....	3-8
3-2	Construction Noise Estimates .....	3-11
3-3	Population Characteristics.....	3-28
3-4	Housing Supply .....	3-29
3-5	EIFS Model Output .....	3-31
3-6	Average Daily Traffic Counts .....	3-34
3-7	Trip Generation .....	3-34
3-8	Construction and Demolition Debris under the Preferred Alternative.....	3-37
3-9	Mitigation Measures.....	3-43
4-1	Summary of Potential Environmental and Socioeconomic Consequences.....	4-2

**Figures**

1-1	Regional Location .....	1-4
2-1	Site Location .....	2-5
2-2	Parcel A .....	2-6
2-3	Parcel B .....	2-7
2-4	Parcel C .....	2-8
2-5	Parcel D.....	2-9
2-6	Parcel E .....	2-10
2-7	Photographs of Gibb Hall.....	2-11
3-1	100-year Floodplain .....	3-15
3-2	Key Observation Point 1 Visual Simulation .....	3-25
3-3	Key Observation Point 2 Visual Simulation .....	3-26
3-4	Key Observation Point 3 Visual Simulation .....	3-27

**ACRONYMS AND ABBREVIATIONS**

## SECTION 1.0 PURPOSE, NEED, AND SCOPE

### 1.1 INTRODUCTION

The Army provides transient lodging for Soldiers and their families on temporary duty and permanent change of station travel. Because funding shortfalls over many years prevented the proper maintenance, repair, or replacement of facilities, approximately 80 percent of the Army's lodging inventory was found to not meet acceptable quality standards.

The Privatization of Army Lodging (PAL) program is an initiative to improve facilities and services for transient lodging users. It is founded on the Military Housing Privatization Initiative (MHPI) established in the 1996 Defense Authorization Act.<sup>1</sup> The MHPI authorizes the Army to obtain private capital by leveraging government contributions, making efficient use of limited resources, and using a variety of private-sector approaches to build, renovate, and operate lodging. This environmental assessment (EA) evaluates implementation of the PAL program at Fort Hunter Liggett, California.

All Army installations in the Continental United States, Alaska, Hawaii, and Puerto Rico, that have need for on-post transient housing, will participate in the PAL program. The Army divided its installations into three groups (A, B, and C) for implementing the PAL program. Group A is 10 installations; Group B 11; and Group C, of which Fort Hunter Liggett is a part, the remaining 21 participating Army installations. The installations participating in the PAL Program are identified in Table 1-1.

**Table 1-1  
Installations Participating in PAL by Group**

<b>Group A Installations</b>	<b>Group B Installations</b>	<b>Group C Installations</b>
Fort Hood, TX	Fort Bliss, TX	Fort Meade, MD
Fort Sam Houston, TX	Fort Buchanan, PR	Aberdeen Proving Ground, MD
Fort Sill, OK	Fort Belvoir, VA	Fort Drum, NY
Fort Riley, KS	Fort Hamilton, NY	USAG West Point, NY
Fort Leavenworth, KS	Fort Gordon, GA	Fort McCoy, WI
Fort Rucker, AL	White Sands Missile Range, NM	Dugway Proving Ground, UT
Fort Myer, VA	Fort Huachuca, AZ	Fort Carson, CO
Yuma Proving Ground, AZ	Fort Leonard Wood, MO	Carlisle Barracks, PA
Fort Polk, LA	Fort Wainwright, AK	Fort Lee, VA
Fort Shafter Tripler AMC, HI	Fort Knox, KY	Fort Bragg, NC
	Fort Campbell, KY/TN	Fort Jackson, SC
		Redstone Arsenal, AL
		Fort Hunter Liggett, CA
		Presidio of Monterey, CA
		Camp Parks, CA
		BT Collins, CA
		Fort Stewart, GA
		Hunter Army Air Field, GA
		Fort Benning, GA
		JB Lewis-McChord, WA

<sup>1</sup> Section 2801, National Defense Authorization Act for Fiscal Year 1996, Public Law 104-106, as amended (codified at Title 10 of the *United States Code* (U.S.C.), Sections 2871–2885).

## 1.2 PURPOSE AND NEED

The Army proposes to privatize operation of its lodging at Fort Hunter Liggett (Figure 1-1, at the end of this section). This is the Army's Preferred Alternative. The purpose of the Preferred Alternative is to transfer ownership and operation of the transient lodging to the private sector under a long-term lease.

The need for the proposed action is to improve the quality of life for Soldiers, their families, and other personnel eligible to use Army lodging. The lodging facility at Fort Hunter Liggett is old, and its rehabilitation is not economically feasible. By leveraging scarce resources, the Army can obtain the benefits of capital improvements and professional management available through the private sector's investment and experience. The PAL program sets aside funds for long-term sustainment of such facilities. Privatization of lodging would enable the Army to focus its resources on its core competencies.

## 1.3 SCOPE OF ANALYSIS

This EA has been developed in accordance with the National Environmental Policy Act (NEPA) of 1969 and implementing regulations issued by the Council on Environmental Quality (CEQ) and the Army.<sup>2</sup> An interdisciplinary team of environmental scientists, biologists, ecologists, geologists, planners, economists, engineers, archaeologists, historians, lawyers, and military technicians reviewed the proposed action in light of existing conditions and identified relevant beneficial and adverse effects associated with the Preferred Alternative and No Action Alternative.

The purpose of the EA is to inform Army decision makers and the public of the likely environmental consequences of privatizing transient lodging at Fort Hunter Liggett.

This EA focuses on evaluating environmental effects that are reasonably foreseeable within the initial development period (IDP), approximately the first 7 years of implementing privatization, described in detail in Section 2.3. This is the period during which the Army's privatization entity would accomplish demolition, renovation, and new construction of lodging, and take responsibility for owning, operating, and maintaining the on-post lodging facilities. Potential environmental effects beyond 2020 would be speculative; therefore, they are not analyzed in this EA.

## 1.4 PUBLIC INVOLVEMENT

The Army invites public participation in the NEPA process. Consideration of views and information from all interested persons promotes open communication and enables better decision-making. All agencies, organizations, and members of the public having a potential interest in the proposed action, including minority, low-income, disadvantaged, and Native American groups, are urged to participate in the decision-making process.

Army guidance provides for public participation in the NEPA process. If the EA concludes that the proposed action would not result in significant environmental effects, the Army may issue a draft finding of no significant impact (FNSI). The Army will then allow 30 days for agencies and the public to submit comments on the EA or draft FNSI. After consideration of comments

---

<sup>2</sup> CEQ Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, Title 40 of the Code of Federal Regulations (CFR), Parts 1500–1508, and Environmental Analysis of Army Actions, 32 CFR Part 651.

received from the public or agencies, the Army may approve the FNSI and implement the Preferred Alternative.

If, during the development of the EA, it is determined that significant effects would be likely, the Army will issue a notice of intent to prepare an environmental impact statement.

## **1.5 PRIVATIZATION AUTHORITIES**

The PAL program is founded on the MHPI. The essence of the MHPI is that it comprehensively allows access to private-sector financial and management resources for constructing, maintaining, managing, renovating, replacing, rehabilitating, and developing housing. In 2002 Congress amended the MHPI to provide that “unaccompanied personnel housing” includes “transient housing intended to be occupied by members of the armed forces on temporary duty.”<sup>3</sup>

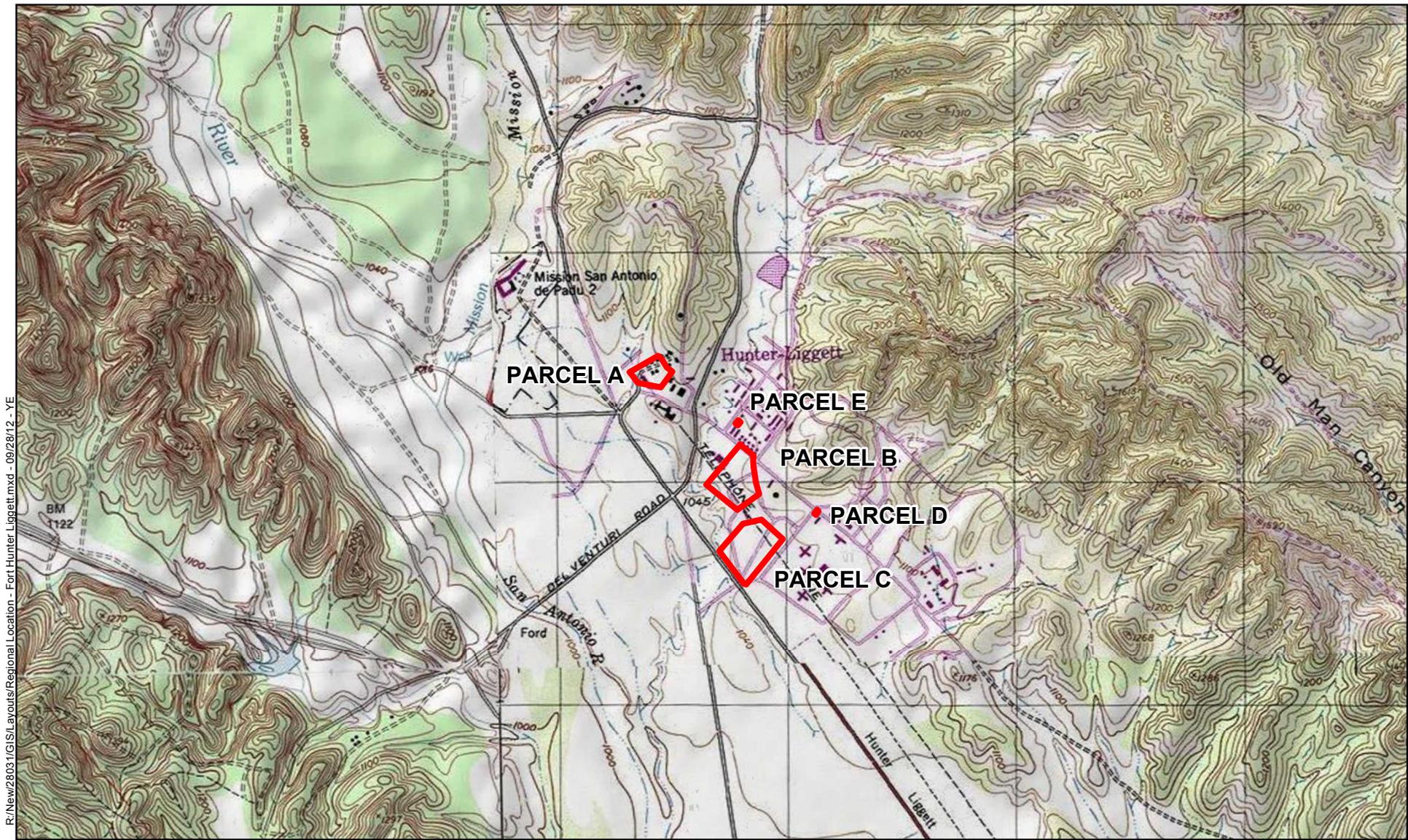
The Army competitively selected Lend Lease as its development entity to privatize the Army lodging at Fort Hunter Liggett. Lend Lease formed a special-purpose entity, Rest Easy, LLC (Rest Easy) to execute the lease. Lend Lease would redevelop the lodging facilities, and InterContinental Hotels Group (IHG), its contracted hotelier, would take over the lodging operations. Lend Lease completed a Lodging Development Management Plan (LDMP) to serve as the initial business plan for the project. The LDMP served as a guide to the PAL lease. The PAL lease will be expanded to include additional installations, including Fort Hunter Liggett. Upon implementation of the amended and restated PAL lease, transfer of assets and transition to privatized operations would begin. For its part, the Army would convey its lodging facilities to the developer and provide a long-term lease of other land for constructing new lodging facilities. In return, the Army would obtain the benefit of modern facilities and services equal to the standards prevailing in the commercial sector.

## **1.6 ENVIRONMENTAL LAWS AND REGULATIONS**

Army decisions that affect environmental resources and conditions occur within the framework of numerous laws, regulations, and executive orders (EOs). Some of the authorities prescribe standards for compliance. Others require specific planning and management actions to protect environmental values potentially affected by Army actions. These include the Clean Air Act, Clean Water Act, Noise Control Act, Endangered Species Act, National Historic Preservation Act, Archaeological Resources Protection Act, Resource Conservation and Recovery Act, Energy Policy Act, Energy Independence and Security Act, and Toxic Substances Control Act. EOs bearing on the proposed action include EO 11988 (*Floodplain Management*), EO 11990 (*Protection of Wetlands*), EO 12088 (*Federal Compliance with Pollution Control Standards*), EO 12580 (*Superfund Implementation*), EO 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), EO 13045 (*Protection of Children from Environmental Health Risks and Safety Risks*), EO 13175 (*Consultation and Coordination with Indian Tribal Governments*), EO 13186 (*Responsibilities of Federal Agencies to Protect Migratory Birds*), EO 13423 (*Strengthening Federal Environmental, Energy, and Transportation Management*), and EO 13514 (*Federal Leadership in Environmental, Energy, and Economic Performance*). Where useful to better understanding, key provisions of these statutes and EOs are described in more detail in the text of the EA. The text of EOs can be accessed at <http://www.archives.gov/federal-register/executive-orders/>, and the text of public laws can be accessed at <http://www.archives.gov/federal-register/laws/>.

---

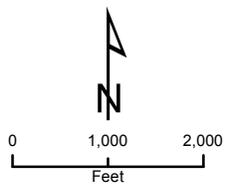
<sup>3</sup> Section 2803(b), National Defense Authorization Act for Fiscal Year 2003, Public Law 107-314.



R:\New\28031\GIS\Layouts\Regional Location - Fort Hunter Liggett.mxd - 09/28/12 - YE

**Regional Location**

Fort Hunter Liggett, California



**Figure 1-1**

Source: Topo - 2011 National Geographic Society, i-cubed.

## **SECTION 2.0**

### **PROPOSED ACTION AND ALTERNATIVES**

#### **2.1 INTRODUCTION**

The Army proposes to implement the PAL program at Fort Hunter Liggett. The Army would convey the existing lodging facility to Rest Easy for short-term use and would grant a 46-year lease of other land for constructing new lodging facilities. Under a separate support lease, the Army would also provide for the use of an existing front desk area and warehouse space in two other buildings by Rest Easy.

Rest Easy would be expected to meet Fort Hunter Liggett's lodging requirements by owning, operating, and maintaining the existing facilities, renovating inadequate facilities, and constructing new ones.

Implementing the PAL program at Fort Hunter Liggett would entail constructing a new lodging facility and renovating existing facilities. When siting facilities, garrison commanders take into account the following criteria: availability of developable land, consistency with the land use allocations of the installation's master plan, compatibility with adjacent functions, proximity to relevant community services (e.g., Commissary, Post Exchange, and recreation and entertainment venues), and avoidance of evident environmental and cultural resource issues (e.g., protected species, cultural resources, past hazardous waste sites, etc.). Fort Hunter Liggett officials gave substantial weight to the proximity of new lodging facilities to existing lodging facilities and their required support functions to enable efficient and cost-effective management of operations, resulting in the siting locations shown on Figure 2-1 at the end of this section.

This section presents the Preferred Alternative and the No Action Alternative. It identifies other alternatives considered but eliminated from detailed study. The proposed action in Section 2.3 is the Army's Preferred Alternative.

#### **2.2 NO ACTION ALTERNATIVE**

CEQ regulations require the No Action Alternative as a baseline against which the impacts of the Preferred Alternative and other alternatives can be evaluated.

Under the No Action Alternative, the Army would not implement the PAL program at Fort Hunter Liggett. The Army would continue to provide lodging through facilities funded by Congressional appropriations and by Army Lodging resources that rely on the use of nonappropriated funds. On the basis of historical trends, it is assumed that government would be unable to dedicate additional resources to support the Army Lodging operation and that maintenance backlogs would remain at present levels or increase. By not implementing the PAL program, the Army would forego opportunities to leverage private-sector financing for lodging. Quality of life for personnel using the lodging facilities would in all likelihood decline based on current funding levels.

#### **2.3 PREFERRED ALTERNATIVE**

##### **2.3.1 Description of Existing Lodging and Available Land**

Fort Hunter Liggett currently provides on-post transient lodging through the use of 50 lodging units within Building 128 (Gibb Hall). Recent lodging trends at Fort Hunter Liggett include an

average of 14,591 room nights issued per year, which is equivalent to approximately 80 percent occupancy, over the three-year period from Fiscal Year 2009 through Fiscal Year 2011. During that same period, an annual average of 16,651 Certificates of Non-Availability (CNAs) were issued. For this project, the lodging units and areas available for new construction have been grouped into five distinct parcels, labeled A through E. Table 2-1 identifies the existing lodging inventory and land being made available to the PAL Program by parcel.

**Table 2-1  
Existing Lodging Facilities, Fort Hunter Liggett**

Parcel	Building(s)	Building name	Year built	Lodging units	Building square footage	Notes
Parcel A	128	Gibb Hall	1970	50	20,442	
Parcel B	N/A	N/A	N/A	N/A	N/A	Undeveloped land, with the exception of access roads and a motor pool
Parcel C	N/A	N/A	N/A	N/A	N/A	Undeveloped land, with the exception of access roads and a running track
Parcel D	196	N/A	N/A	N/A		Lease of only the front desk area, administrative offices, and storage space
Parcel E	168B	N/A	N/A	N/A		Lease of only the lodging storage space
<b>Total lodging units</b>				50		

Figures 2-2 through 2-6 provide more detailed views of each parcel, and Figure 2-7 consists of a photo of Gibb Hall, the existing lodging at Fort Hunter Liggett. These figures are presented at the end of this section.

The following paragraphs describe each parcel containing the existing lodging facility and the parcels of land being made available to Rest Easy for siting a new lodging facility.

**Parcel A.** This parcel consists of Building 128, Gibb Hall, and 3.66 acres of associated land on Infantry Road with Mission Road to the west and Bullard Drive to the north. See Figure 2-2 for a map of the site and Figure 2-7 for photographs of the building. The two-story, wood-frame building was built in 1970 for use as a guesthouse and offers 50 lodging units.

**Parcel B.** This parcel consists of 9.12 acres of mostly undeveloped open space off Infantry Road to the north and Mission Road to the southwest. Access roads are within the northern and eastern borders of the parcel. Development on the parcel includes a small car wash facility, electrical station for mobile food trucks, and a motor pool. See Figure 2-3 for an aerial view of the parcel.

**Parcel C.** This parcel consists of 10.43 acres of undeveloped, mostly grass-covered open space bounded by Bradley Drive to the southeast and Mission Road to the southwest. An access road runs through the middle of the parcel. There is a running track, but no structures within the boundaries of the parcel. See Figure 2-4 for an aerial view of the parcel.

**Parcel D.** Parcel D consists of only the area of Building 196 used for lodging operations (front desk area, administrative offices, and storage). The rest of the building and land areas are not included in the parcel. See Figure 2-5 for an aerial view of the parcel.

**Parcel E.** Parcel E consists of only the area of Building 168B used for lodging operations (approximately 3,200 square feet of storage). The rest of the building and land areas are not included in the parcel. See Figure 2-6 for an aerial view of the parcel.

### 2.3.2 Proposed Lodging Actions

Implementing the PAL program at Fort Hunter Liggett would involve a short-term hold (STH) lease, a long-term hold (LTH) lease, and building renovation, demolition, and construction as described in the following paragraphs and listed in Table 2-2. The Army also would execute a separate support lease for the use of portions of two buildings. Upon conveyance and grant of the leases, Rest Easy would assume responsibility for all transient lodging assets, and IHG would take over operations as provided for in the lease. Under the Preferred Alternative, the total number of lodging units at Fort Hunter Liggett would increase from 50 to 54 to meet current and projected on-post demand resulting from recent mission changes.

**Table 2-2  
Fort Hunter Liggett PAL Preferred Alternative**

Parcel	Acres	Building(s)	Lodging units		PAL action
			Beginning state	End state	
<b>Parcel A (Gibb Hall) – STH</b>					
	3.66	B128	50	0	Make minor renovations for STH and then demolish after new hotel goes into operation
<b>Parcel B (Infantry Road Site) – LTH (Option 1, preferred site)</b>					
	9.12	N/A	0	54	Build two-story, 54-room Candlewood Suites
<b>Parcel C (Bradley Drive Site) – LTH (Option 2, alternate site)</b>					
	10.43	N/A	0	54	Build two-story, 54-room Candlewood Suites

Notes: STH = short-term hold; LTH = long-term hold; N/A = not applicable.

The Candlewood Suites would be constructed on either Parcel B or Parcel C.

**STH and support lease actions.** Initially, the existing lodging structure (identified in Table 2-1) would be conveyed to Rest Easy. Gibb Hall (Building 128, Parcel A) would be conveyed under to Rest Easy under a 7-year STH lease. Gibb Hall would be used during the IDP to maintain an appropriate number of available rooms while new lodging was being built. At the end of the IDP or as the new hotel became operational, Building 128 would either be returned to the Army for conversion to other non-lodging use(s) or would be demolished by Rest Easy, and the land would revert back to Fort Hunter Liggett. The final disposition of the facility would be coordinated through the Garrison Commander and be based on Army facility requirements. For the purposes of analysis, the EA assumes that the building would be demolished. During the IDP, the existing lodge (Building 128) would undergo minor renovations, such as making any necessary life safety and critical repairs, reconfiguring and improving public spaces, and improving the interiors of the guestrooms.

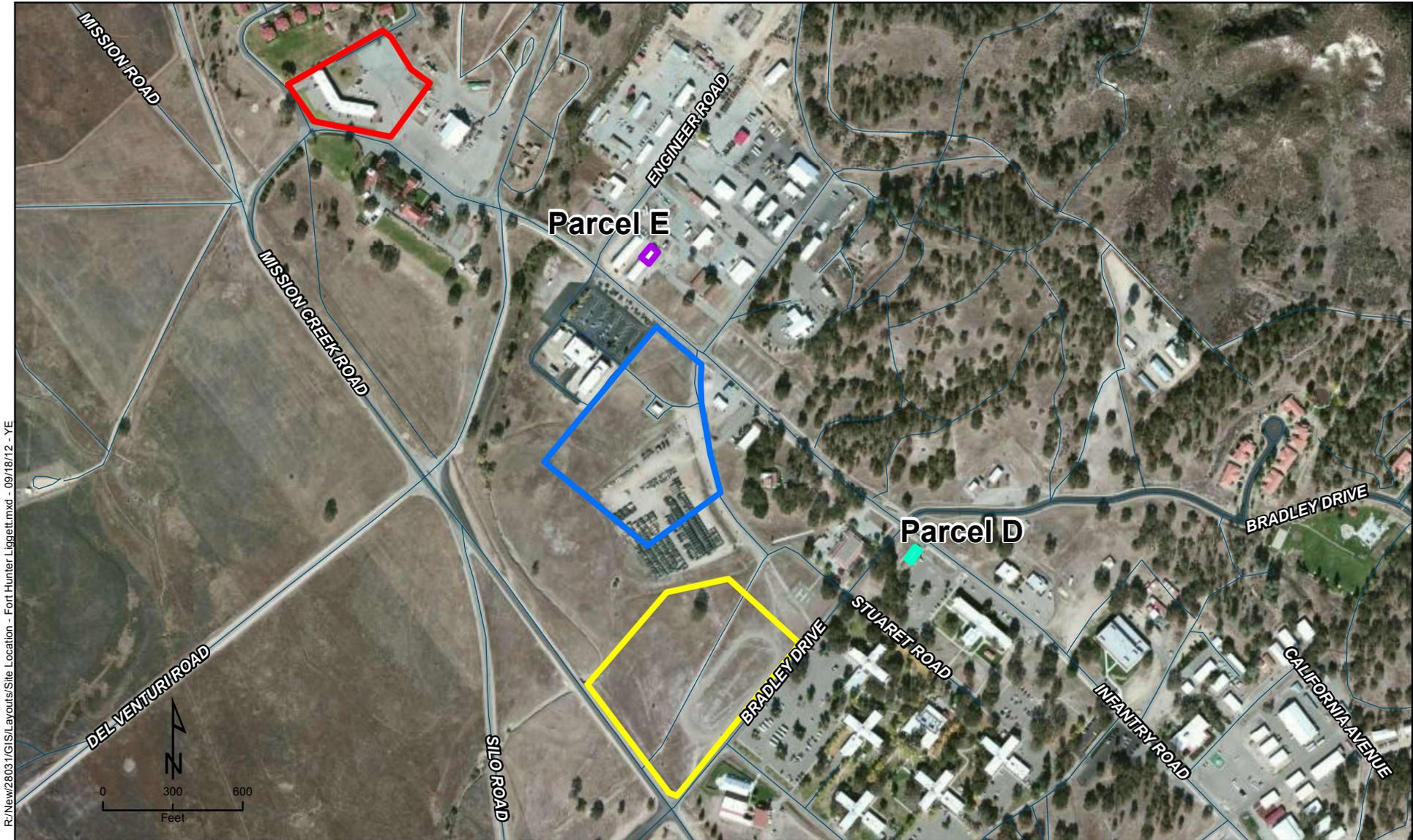
The check-in desk for Gibb Hall is located in Building 196. A portion of the Building 168B warehouse facility is used as lodging storage space. The Army would execute a separate support lease for that portion of Building 196 for the continued use of the check-in area for that portion of Building 168B for its continued use as lodging storage space until such time as the new hotel is completed, at which time the lease would terminate.

***LTH lease actions and new construction.*** Rest Easy plans to replace the existing lodging infrastructure at Fort Hunter Liggett by building a two-story, 54-room Candlewood Suites hotel and associated parking on either Parcel B or Parcel C (Figures 2-3 and 2-4). Hotel construction activities would include removal of existing buildings and structures, vegetation clearing, and site grading. The Army would grant Rest Easy a 46-year lease of the selected parcel. The EA examines the potential effects of constructing and operating a new hotel on either Parcel B or C. However, only one will be selected and included in the PAL lease. The other parcel would remain in the Army's inventory.

## **2.4 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY**

***Renovation of existing lodging facilities.*** The Army considered renovating Gibb Hall, the existing lodging facility, to meet the transient lodging needs of Soldiers, their dependents, and other authorized patrons. This would involve modifying the facility into a Holiday Inn Express, the minimum lodging standard under the PAL program. Due to the age, condition, and structure of Gibb Hall, the Army determined that rehabilitation was not economically viable. For this reason, this alternative is not feasible and is not evaluated in detail in this EA.

***Reliance on the off-post hotel market.*** The Army now provides transient lodging to Soldiers, their dependents, and other authorized patrons. In lieu of privatizing the function, the Army could choose to discontinue all lodging operations on Army installations. This would require prospective lodging patrons to rely entirely on private-sector hotels and motels for their lodging. Across the Army, many of the current occupants of Army lodging are attending Army schools located on-post. Eliminating on-post lodging would lengthen the students' workdays because of commuting; increase their transportation costs (without specific authorization, personnel on temporary duty might be ineligible for rental vehicle reimbursement); and, in some instances, cause them to encounter lodging shortages in adjacent communities. Local hospitality providers could experience wide swings in occupancy rates, especially between Army school sessions. Moving Soldiers and their families off-post would increase commuting distances and the use of single occupancy vehicles, which would be in direct conflict with the Army's mandates to reduce greenhouse gas emissions. Off-post lodging in the immediate vicinity of Fort Hunter Liggett is extremely limited, with more lodging available in King City (a 30-minute drive) and Paso Robles (a 45-minute drive). If the Army terminated its lodging program, the existing lodging building at Fort Hunter Liggett would be abandoned. The Army could incur substantial costs to convert the building to alternative use. The combination of idling of the facilities until alternative uses could be determined and the time needed to achieve such alternative uses would contravene the Army's policy to manage its resources to optimal potential. For these reasons, this alternative is not feasible and is not evaluated in detail in this EA.



R:\New\280317\GIS\Layouts\Site Location - Fort Hunter Liggett.mxd - 09/18/12 - YE

Parcel B is the preferred site for the new hotel, and Parcel C is the alternate site.

Note: Parcel boundaries to be revised following completion of the metes and bounds survey.

## Site Location

Fort Hunter Liggett, California



- Parcel A
- Parcel B
- Parcel C
- Parcel D
- Parcel E

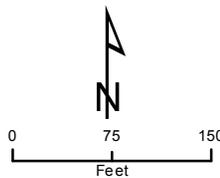
**Figure 2-1**



R:\New\28031\GIS\Layouts\Parcel A - Fort Hunter.mxd - 04/10/12 - YE

Note: Parcel boundary to be revised following completion of the metes and bounds survey.

**Parcel A**



 Parcel A

Fort Hunter Liggett, California



**Figure 2-2**

Source: Aerial - 2010 Microsoft Corporation and its data suppliers.



R:\New\28031\GIS\Layouts\Parcel B - Fort Hunter.mxd - 09/28/12 - YE

Parcel B is the preferred site for the new hotel.

Note: Parcel boundary to be revised following completion of the metes and bounds survey.

**Parcel B**



 Parcel B

Fort Hunter Liggett, California



**Figure 2-3**



R:\New\28031\GIS\Layouts\Parcel C - Fort Hunter.mxd - 09/28/12 - YE

Parcel C is the alternate site for the new hotel.

Note: Parcel boundary to be revised following completion of the metes and bounds survey.

**Parcel C**



 Parcel C

Fort Hunter Liggett, California



**Figure 2-4**

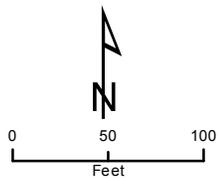
Source: Aerial - 2010 Microsoft Corporation and its data suppliers.



R:\New\28031\GIS\Layouts\Parcel D - Fort Hunter.mxd - 04/10/12 - YE

Note: Parcel boundary to be revised following completion of the metes and bounds survey.

**Parcel D**



 Parcel D

Fort Hunter Liggett, California



**Figure 2-5**

Source: Aerial - 2010 Microsoft Corporation and its data suppliers.



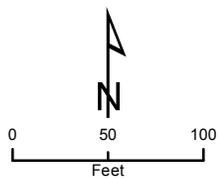
R:\New\28031\GIS\Layouts\Parcel E - Fort Hunter Liggett.mxd 08/16/12 - YE

Note: Parcel boundary to be revised following completion of the metes and bounds survey.

**Parcel E**

 Parcel E

Fort Hunter Liggett, California



**Figure 2-6**

Source: Aerial - 2010 Microsoft Corporation and its data suppliers.



**Figure 2-7 Photographs of Gibb Hall**

## **SECTION 3.0**

### **AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

#### **3.1 LAND USE**

This section describes the effects of the Preferred and No Action Alternatives on land use. Land use typically refers to the human use of the land for various purposes, including economic production, institutional uses, and natural resources conservation. Land use is frequently regulated by management plans, policies, zoning ordinances, and regulations that determine the types of uses allowable or that protect specially designated resources or address environmentally sensitive issues.

##### **3.1.1 Affected Environment**

For this environmental assessment, the region of influence (ROI) includes lands in and near the project site that could be affected by the Preferred Alternative.

Fort Hunter Liggett is approximately 10 miles northwest of Lockwood, California, and about 55 miles southeast of Monterey, California. The installation is in Monterey County in central California. The installation is bounded by the Los Padres National Forest on the north and west, the Santa Lucia Mountains and privately owned agricultural and residential land on the east, and primarily agricultural land near the Monterey and San Luis Obispo County line on the south. At approximately 162,000 acres, Fort Hunter Liggett is the largest Army Reserve property in the state of California. The project parcels are in the cantonment area of Fort Hunter Liggett that is largely developed with administrative offices, commercial and recreational services, maintenance facilities, warehouses, support facilities, and housing areas.

An Installation Development Plan (Fort Hunter Liggett 2012a) is being finalized as part of the Real Property Master Plan (RPMP) for Fort Hunter Liggett. The Installation Development Plan is one of the five components of the RPMP, a technical planning document that will guide development on the installation. The Installation Development Plan provides the direction for future development in transportation, building use and size, parks and open space, and parking and emergency access. The Installation Development Plan differentiates between circulation and parking for tactical and commercial vehicles.

The overall vision guiding future development of the installation is to create a training environment built around a small town setting. It will include walkable main streets and a central town square, creating a positive living and working atmosphere for Soldiers, civilians, and their families.

This vision has been refined into four specific development goals guiding the Installation Development Plan:

**Goal 1: Flexible Training Environment.** Create a sustainable plan for development that maximizes opportunities for flexible use and provides room for growth to meet future needs.

**Goal 2: Attractive Small Town.** Create places that contribute to a vibrant small town feel and that enhance community cohesion.

**Goal 3: Walkable Main Streets.** Create streets that provide safe, convenient, and comfortable walks in a pedestrian-centric environment.

**Goal 4: Usable Town Square.** Provide an area where Soldiers, civilians, and families can gather to live, work, shop, and play.

The Installation Development Plan has three different planning and design districts, each including an area development plan (ADP) further guiding and refining land uses for the RPMP: Hacienda Heights, Blackhawk Hills, and Mission Valley. Hacienda Heights contains housing and public facilities; Blackhawk Hills is a training campus, with barracks and classroom facilities; Mission Valley is the designated industrial district, with allowance for some training areas. Parcels A through E are primarily in the Hacienda Heights district, and the land use designations in the Installation Development Plan and ADP are designed to guide future land uses in these areas.

The following paragraphs describe each parcel. They contain the existing lodging facility and the parcels of land being made available to Rest Easy for siting a new lodging facility.

The subject property includes five parcels of land: Gibb Hall (Parcel A), New Build Site (Parcel B), New Build Site (Parcel C), Building 196 (Parcel D), and Building 168B (Parcel E). The parcels are described below and are shown on Figures 2-2 through 2-6.

- ***Gibb Hall (Parcel A).*** Parcel A is approximately 3.66 acres. It includes Army Lodging Building 128 and Gibb Hall, constructed in 1970. Gibb Hall is a 20,442-square-foot, two-story structure with no basement and 50 guest rooms. The building has single, double, and suite guest rooms, a break room, back-of-house laundry facilities, and maintenance, storage, and receiving areas. Asphalt parking areas or roadways surround the building on all sides, except for a small area at the northwest end of the building. The parking areas are accessed from Infantry Road. Next to Parcel A is the Fort Hunter Liggett Fire Department (Building 120) on the east, the Hacienda (Building 101) lodging facility on the south across Infantry Road, residential housing on the north, and undeveloped land covered in vegetation on the west.
- ***New Build Site (Parcel B).*** Parcel B is approximately 9.12 acres. Its northwest half is mostly undeveloped and is covered primarily with grass, weeds, and wildflowers. Light development includes a small car wash facility and an electrical hookup station for mobile food trucks. Its southeastern half is the 80<sup>th</sup> Army School System Training Center Maintenance Motor Pool, accessed by a dirt roadway along the parcel's east border. Next to Parcel B is the Army and Air Force Exchange Services (AAFES) Fort Hunter Liggett Main Store, or Post Exchange (PX), Building P-80 to the north. The Building 116/166 gas station, the Building 120 bowling alley, and the Building 190 chapel are on the east, undeveloped land is on the west, and a portion of the 80th Army School System Training Center Maintenance Motor Pool is on the south. Current land uses for Parcel B include open space and a parking and a staging area for vehicles. Surrounding land uses are a movie theatre and grocery/retail store, with associated parking on the northeast and vehicle parking and staging on the southeast.
- ***New Build Site (Parcel C).*** Parcel C, approximately 10.43 acres, includes a running track and a dirt road orientated north-south. It is mostly undeveloped, and the undeveloped portion is covered with grass and weeds with a large tree near its north border. Next to Parcel C is the 80th Army School System Training Center Maintenance Motor Pool, a helicopter pad, and Building 210 medical clinic on the north; undeveloped land and Mission Road on the west; the DeAnza Sports Center Building 219 and the Fort Hunter Liggett main entrance on the south; and administration and training facilities on the east. Parcel C's land use is open space and recreational facilities, such as a running track.

Surrounding land uses are open space and parking facilities. A helipad for the nearby medical clinic is next to the northeastern parcel boundary.

- **Building 196 (Parcel D).** Parcel D is an approximately 1,800-square-foot portion of Building 196. Army Lodging uses this portion of Building 196 to support the Gibb Hall (Parcel A) lodging by providing the lodging check-in desk, administration offices, and storage. Next to Parcel D is undeveloped land and Bradley Drive on the west, an asphalt parking area on the east, an asphalt parking area and Infantry Road on the north, and the portion of Building 196 not included in Parcel D on the south.
- **Building 168B (Parcel E).** Parcel E is an approximately 3,200-square-foot portion of a warehouse. Army Lodging uses Building 168B for storage. Next to Parcel E is the Building 144 warehouse on the west (used by Family Morale, Welfare, and Recreation), Building 169 on the east, the Teen Center (Building 177) on the north, and, across Infantry Road, the AAFES Fort Hunter Liggett Main Store (Building P-80) on the south.

### 3.1.2 Environmental Consequences

This section identifies and describes the land use effects that may result from implementing the Preferred Alternative and the No Action Alternative. The analysis of the Preferred Alternative addresses the options of constructing and operating the new hotel on either Parcel B or Parcel C.

#### 3.1.2.1 Preferred Alternative

**Parcel B** is in the Hacienda Heights planning and design district that is designated for housing and public facilities. According to the ADP for Hacienda Heights, a new hotel is to be located in the northwest area of Parcel B, next to a planned town square. Therefore, the Preferred Alternative would be consistent with the planning and design goals of the ADP. The Installation Development Plan has a Regulating Plan that includes land use designations for the installation. According to the Regulating Plan, land use designations in Parcel B are Campus Building Standard, Civic Building Standard, Industrial Building Standard, and Commercial Building Standard. Development of the Preferred Alternative would not conflict with these land use designations. The new hotel would not conflict with the open space and parking and maintenance uses in the parcel or the retail, movie theatre, and chapel uses next to and surrounding the parcel. The hotel would likely make use of these facilities, complementing their use. Therefore, impacts on land use would be minor adverse.

**Parcel C** is also in the Hacienda Heights district. According to the ADP Illustrative Plan, no buildings are planned in the area of the parcel; instead, this area is planned primarily for ball fields, open space, and parking. In addition, the Regulating Plan designated Parcel C as Campus Building Standard or Parks/Open Space. Development of the Preferred Alternative would not conflict with these uses because the area to be used by the new hotel would not occupy an area of this parcel that would preclude use of these facilities. Further, residents of the lodging facility would likely use these facilities, so the uses would complement one another. Land use impacts would be minor adverse.

#### 3.1.2.2 No Action Alternative

No effects on land use would occur. Under the No Action Alternative, the Army would not implement the PAL program at Fort Hunter Liggett and would continue to provide lodging through the existing facility; no changes in land use would result.

## **3.2 AESTHETICS AND VISUAL RESOURCES**

This section describes the aesthetic resources associated with the Preferred Alternative and No Action Alternative. Aesthetic resources are the visible physical features on a landscape—land, water, vegetation, structures, and cultural and historic landmarks. The ROI for aesthetic resources consists of Parcels A, B, C, D, and E and the surrounding landscape. Potential effects on the aesthetic resources are influenced by sensitive receptors, such as nearby residents and visitors, and vantage points involving the ROI.

### **3.2.1 Affected Environment**

#### **3.2.1.1 Landscape Character of Surrounding Area**

The surrounding off-post visual landscape is characterized as generally undeveloped mountainous terrain. The installation is bounded by the Salinas Valley on the north, Los Padres National Forest on the north and west, the Santa Lucia Mountains and privately owned agricultural and residential land on the east, and primarily agricultural land near the Monterey and San Luis Obispo County line on the south. Elevations range from approximately 760 feet to 3,740 feet at Alder Peak, the highest point on the installation.

#### **3.2.1.2 Landscape Character of the Project Sites**

The new hotel would be built on Parcel B or Parcel C. Parcel B is 9.12 acres of undeveloped land, except for access roads and a motor pool. Parcel C is 10.43 acres of undeveloped land, except for access roads and a running track. Both sites are flat and have no distinguishing landscape features.

The visual landscape in and around the ROI has been altered by urban development features limited to the north, northeast, east, and southeast portions of the installation. Views in these directions are of buildings and structures of varying shapes and sizes associated with the installation or roadways that service the installation. Background views in these directions are the undeveloped lands of Los Padres National Forest, Santa Lucia Mountains, and Fort Hunter Liggett. Lands to the northwest, west, and southwest are undeveloped, with unobstructed views.

Sources of daytime and nighttime lighting on and around the ROI are the existing lodging facility (Gibb Hall, B128) on Parcel A and exterior lighting of other on-post facilities to the north, northeast, east, and southeast of Parcels B and C.

### **3.2.2 Environmental Consequences**

Potential impacts on aesthetic resources are based on a review of project site conditions, applicable US Army Installation Design Standards (US Army 2004a), including the 2012 Fort Hunter Liggett Installation Design Guide (IDG, Fort Hunter Liggett 2012b), pertaining to building design standards and related aesthetic resources, and proposed changes to the visual landscape. Various actions that might create changes to landscape elements were considered in identifying potential impacts on aesthetic resources.

The IDG provides standards for building construction and site development, transportation standards, landscape design, and interior design that are intended to improve the quality of the total built and natural environment, including the quality of visual design. There are standards for the renovation of existing buildings and the construction of new buildings. The aesthetic design guidelines in the IDG recommend the incorporation of the Mission Revival Style of architecture, found in the Hacienda, in future buildings on the installation. Not only is this style recommended,

but also the color palette of the Hacienda is recommended for future construction projects to enhance the historic theme on the installation. Architectural design standards regulate the form, setbacks, uses, and support requirements of any construction project at Fort Hunter Liggett. In combination with the Regulating Plan, these standards create a form-based code designed to facilitate mission readiness and walkable development patterns (Fort Hunter Liggett 2012b).

Primary viewers of the proposed lodging facility are people living and working on-post and members of the public who drive Mission Road to access public and private lands both within the installation and outside it. These viewers are considered highly sensitive to changes in the landscape. In general, residents are considered more sensitive than employees because they are on the installation for longer periods of time, unless the employees also live on the installation. The proposed hotel would be visible from Mission Road, a road typically open to the public to access the private inholding of the historic Mission San Antonia de Padua.

Where modifications repeat the general elements of the landscape, the degree of visual contrast is lower, and there are generally fewer impacts. Where modification introduces pronounced changes, the degree of contrast is greater, and there are subsequent impacts.

### **3.2.2.1 Preferred Alternative**

The Preferred Alternative would create short- and long-term impacts on aesthetic resources during renovation and demolition of the facility on Parcel A and the construction of the new hotel on Parcel B or C.

During construction, there would be short-term, minor adverse impacts on the visual character of the ROI and surroundings. An increase in traffic from project vehicles, construction activity, and equipment would be visible and would slightly contrast with the surrounding environment. Fugitive dust during construction would be minimized by dust control best management practices (BMPs) and would have little or no impact on visibility. These adverse impacts would be short term because they would be limited to the duration of construction. Based on their anticipated magnitude and duration, these impacts on aesthetic resources would be minor adverse.

Once completed, a new two-story, 54-room hotel would occupy Parcel B or C near existing, moderate development. Due to its size and the generally undeveloped character of the project sites, the hotel would create a new point of focus in the ROI and surrounding area. The closest on-post facilities from which the new building would be visible on Parcel B are the AAFES Fort Hunter Liggett Main Store and Post Exchange Building P-80 to the northeast and the movie theatre and grocery store to the northwest on Infantry Road; if constructed on Parcel C, the new building would be visible from the DeAnza Sports Center across Bradley Drive.

The new hotel would be subject to design, construction, and maintenance guidelines and requirements for structures, facilities, and landscaping, in accordance with the Army Installation Design Standards (US Army 2004a) and the 2012 Fort Hunter Liggett IDG (Fort Hunter Liggett 2012b). The new hotel would be consistent with the developed landscape of the ROI and surrounding area by repeating the general elements of the existing landscape. Because this type of development is not atypical for this area of the installation and would follow applicable design guidelines, the long-term impacts would be minor adverse.

With the construction of the new hotel, there would be a slight increase in light and glare because the facility would require lights and signs and would have more reflective elements, such as windows, than those that currently existing in the ROI. The increase in lighting and reflectivity would be a noticeable new source of nighttime light. The degree of adverse impacts would vary, depending on screening objects, such as trees. Because similar lighting and reflective elements

currently exist in the ROI and because the new lodging facility would be considered appropriate for the use of Parcels B or C, the additional lighting and reflective elements would not be out of context with the existing landscape; therefore, the hotel would not create a substantial new source of light or glare.

Once construction of the hotel is complete, demolition of Gibb Hall would begin, causing short- and long-term visual impacts. The short-term impacts from demolition would be similar to those occurring during construction of the new hotel and would include the presence of a construction site, construction traffic, and ground disturbance. These adverse impacts would be short term and minor because they would be limited to the duration of the demolition.

**Parcel B.** On Parcel B, the new hotel would block existing views to the south and southwest, from the AAFES Fort Hunter Liggett Main Store and Post Exchange Building P-80, and south and southeast, from the movie theatre and grocery store. The hotel would be visible to the public from Mission Road and from the historic Hacienda. The effects on the Hacienda are described in Section 3.8.2.

**Parcel C.** On Parcel C, the new hotel would block existing views to the north and northwest from the DeAnza Sports Center. The hotel would be visible to the public from Mission Road, the historic Mission San Antonio de Padua, and the Hacienda. The effects on Mission San Antonio de Padua and the Hacienda are described in Section 3.8.2.

#### **3.2.2.2 No Action Alternative**

No effects on the aesthetic environment are expected; no structures would be demolished or constructed, and there would be no changes in operations. The aesthetic environment would remain unaltered. Therefore, there would be no impacts from the No Action Alternative. Degradation of the existing facility over time could result in adverse aesthetic effects if it were not addressed. This type of degradation would occur to any structure, including a new facility, over the extended long term and would be likely to trigger maintenance or renovation of the structure that would be done in accordance with Army Installation Design Standards and the 2012 Fort Hunter Liggett IDG.

### **3.3 AIR QUALITY**

#### **3.3.1 Affected Environment**

**Air Quality.** Fort Hunter Liggett and Monterey County are in the North Central Coast Air Basin. In this air basin, the Monterey Bay Unified Air Pollution Control District (MBUAPCD) is the local regulatory agency and has the primary responsibility for ensuring that state and federal ambient air quality standards are achieved and maintained. MBUAPCD shares this responsibility with the California Air Resources Board, the state regulatory agency for air quality. Monterey County is designated as nonattainment for state ambient air quality standards for ozone and inhalable particulate matter (PM<sub>10</sub>) and is designated in attainment for all other state and federal standards (MBUAPCD 2009a).

Section 176(c) of the Clean Air Act, also known as the General Conformity Rule, requires federal agencies to ensure that actions undertaken in nonattainment or maintenance areas are consistent with the Clean Air Act and the applicable State Implementation Plan. The General Conformity Rule is codified at 40 CFR, Part 51, Subpart W, and 40 CFR, Part 93, Determining Conformity of Federal Actions to State or Federal Implementation Plans.

Ambient air quality data are collected at nine air monitoring stations in the North Central Coast Air Basin. The two stations nearest Fort Hunter Liggett are the Salinas and Carmel Valley stations. From 2006 to 2008 (the most recent, readily available data), the state ozone standard was exceeded twice at the Carmel Valley station and was not exceeded at the Salinas station; the state PM<sub>10</sub> standard was exceeded three times at the Salinas station and was not exceeded at the Carmel Valley station (MBUAPCD 2009b).

Existing sources of air pollutant emissions at Fort Hunter Liggett include stationary and mobile sources. Stationary sources are boilers and furnaces, fuel storage and dispensing, internal combustion engines, wastewater treatment, munitions detonation, and a former landfill. Mobile sources are on-road and off-road government-owned vehicles, privately-owned vehicles, airfield operations, prescribed burning, and construction activities. These activities emit criteria air pollutants and hazardous air pollutants. The installation's emissions of criteria air pollutants and hazardous air pollutants from stationary sources are below the major source thresholds (Moeller 2012a). Prescribed burning and munitions detonation do not count toward major source thresholds, nor do mobile source emissions (Moeller 2012a).

***Greenhouse Gases and Global Warming.*** Greenhouse gases (GHGs) are components of the atmosphere that trap heat relatively near the surface of the earth and contribute to the greenhouse effect and global warming. Most GHGs occur naturally in the atmosphere, but atmospheric concentrations can come from human activities, such as burning fossil fuels. Global temperatures are expected to continue to rise as human activities continue to add carbon dioxide (CO<sub>2</sub>), methane, nitrous oxides, and other greenhouse (or heat-trapping) gases to the atmosphere. Whether rainfall increases or decreases remains difficult to project for specific regions (EPA 2012a; Intergovernmental Panel on Climate Change 2007).

GHG emissions from water treatment and the closed landfill count toward the greenhouse gas major source threshold and have been tabulated as such in the installation's 2011 Air Emissions Inventory (Moeller 2012a). Fort Hunter Liggett's GHG emissions from stationary sources are below the state and federal reporting thresholds and are expected to remain below these thresholds when the California threshold is lowered to 10,000 metric tonnes per year for the 2012 emission year (Moeller 2012a; California Air Resources Board 2012).

EO 13514, Federal Leadership in Environmental, Energy, and Economic Performance, outlines policies intended to ensure that federal agencies evaluate climate change risks and vulnerabilities and manage the short- and long-term effects of climate change on their operations and mission. The EO specifically requires the Army to measure, report, and reduce its GHG emissions from direct and indirect activities. The Department of Defense committed to reduce GHG emissions from noncombat activities 34 percent by 2020 (DoD 2010). The CEQ recently released draft guidance on when and how federal agencies should consider GHG emissions and climate change in NEPA analyses. The draft guidance includes a presumptive effects threshold of 27,563 tons of CO<sub>2</sub>-equivalent emissions annually from a federal action (CEQ 2010).

### **3.3.2 Environmental Consequences**

#### **3.3.2.1 Preferred Alternative**

Short- and long-term minor adverse effects on air quality are expected. Implementing the Preferred Alternative could affect air quality through airborne dust and other pollutants from demolition and construction, and by introducing new stationary sources of pollutants, such as heating boilers. Air quality effects are considered minor unless the anticipated emissions would be greater than the General Conformity Rule applicability threshold, would exceed the GHG

threshold in the draft CEQ guidance, or would contribute to a violation of any federal, state, or local air regulation.

Construction and demolition emissions were estimated for fugitive dust, on- and off-road diesel equipment and vehicles, worker vehicles, and the off-gassing of architectural coatings and paving. Operational emissions would primarily be from building heating and from employee and lodging guest vehicles.

**Air Quality.** The estimated increases in emissions from the Preferred Alternative would be below the General Conformity Rule applicability thresholds (Table 3-1). Therefore, an applicability analysis and formal conformity determination under the General Conformity Rule (40 CFR 93.153) for the activities under the Preferred Alternative would not be required. The proposed project would be exempt from the General Conformity Rule, and a Record of Nonapplicability is in Appendix A.

**Table 3-1  
Annual Air Emissions Compared to Applicability Thresholds**

<b>Pollutant</b>	<b>Construction and Demolition Emissions (tons per year)</b>	<b>Operational Emissions (tons per year)</b>	<b>General Conformity Threshold (tons per year)</b>
Carbon monoxide	3.1	2.9	100
Nitrogen oxides	4.9	0.3	100
Volatile organic compounds	0.8	0.3	100
Sulfur oxides	<0.1	<0.1	100
PM <sub>10</sub>	0.3	<0.1	100
PM <sub>2.5</sub>	0.3	<0.1	100

The air emissions analysis for construction estimated emissions from construction equipment, workers commuting to and from the site, ground disturbance, truck trips for delivery and removal of supplies and equipment, and painting and other architectural coatings. The operational emissions analysis estimated emissions from an additional 35 vehicle trips per day (see Section 3.10, Transportation) and from heating, ventilation, and air conditioning.

For the analysis, it was conservatively assumed that all the construction would be completed in 12 months, although the actual construction period is expected to be longer. Regardless of the ultimate implementation schedule, the effects would be minor. The emissions estimates are more than an order of magnitude below the General Conformity Rule applicability thresholds; thus, small or moderate changes in the facility's siting or design or changes in the quantity and types of construction equipment used would not have a substantial influence on the emission estimates and would not change the level of effects.

BMPs would be implemented during construction to reduce fugitive dust, such as applying water or other materials to dirt roads, material stockpiles, and other surfaces. Fugitive dust would have only short-term minor adverse effects on air quality during construction and demolition because of the BMPs.

Renovation and potential demolition of Gibb Hall could disturb asbestos-containing materials (ACM). Asbestos emissions are regulated at the federal and state levels and by the MBUAPCD.

The disturbance of ACM would have no effect on air quality because renovation and demolition would comply with applicable regulations.

Construction would comply with relevant federal, state, and MBUAPCD rules and regulations. MBUAPCD rules and regulations relevant to air emissions during construction and demolition include Rule 426 that limits the emission of volatile organic compounds from the application of architectural coatings, and Rule 439 that prohibits visible emissions from building removals (MBUAPCD 2012).

The new facility would have furnaces or boilers for heating. Such stationary sources of air emissions could be subject to federal and state air permitting regulations, including New Source Review, Prevention of Significant Deterioration, National Emission Standards for Hazardous Air Pollutants, or New Source Performance Standards. Rest Easy would own, operate, and maintain the new hotel on land leased from Fort Hunter Liggett. In general, activities taking place on leased property would not be under the direct control of Fort Hunter Liggett. Such activities would be by tenants, and Rest Easy would need to do an air quality regulatory analysis to determine if any Clean Air Act permitting is required for the operation of any sources of air emissions. The operational emissions from these boilers are shown in Table 3-1.

**GHGs and Global Warming.** Under the Preferred Alternative, all construction activities combined would generate 454 tons of CO<sub>2</sub> (Appendix A, Table A-8).<sup>1</sup> Annual operational activities would generate emissions from heating and vehicles, would be similar to current conditions, and would be less than construction emissions. The GHG emissions associated with the Preferred Alternative fall below the CEQ threshold, so there would be short- and long-term minor adverse impacts on air quality from GHG emissions.

### 3.3.2.2 **No Action Alternative**

No effects on air quality would occur because there would be no demolition, construction, or changes in operations that would impact ambient air quality conditions.

## 3.4 **NOISE**

### 3.4.1 **Affected Environment**

Noise is unwanted sound. Human response to noise is diverse and varies according to the noise source, the sensitivity and expectations of the noise receptor, the time of day, and the distance from the source to the receptor. Noise is generally measured in decibels or A-weighted decibels (dBA), an adjusted measurement that approximates how the human ear perceives loudness. For this analysis, decibels and dBA are used interchangeably.

Noise is regulated by federal law and state and local regulations and ordinances to prevent hearing damage and to regulate unwanted sound. Chapter 14 of AR 200-1, *Environmental Protection and Enhancement*, implements federal noise laws and outlines Army noise policy. The Army noise policy recognizes three noise zones to aid in land use planning on and near installations. Noise Zone I has moderate to minimal noise exposure from aircraft operations, weapons firing, and other noise sources. Noise Zone I is acceptable for noise-sensitive land uses such as housing, schools, and medical facilities. Noise Zone II has significant noise exposure and

---

<sup>1</sup>CO<sub>2</sub> is the predominant GHG associated with combustion; therefore, most of the GHG emissions would be CO<sub>2</sub>. CO<sub>2</sub> and CO<sub>2</sub>e are assumed to be equivalent in this calculation.

is not recommended for noise-sensitive land uses. Noise Zone III is an area of severe noise exposure and is unacceptable for noise-sensitive land uses.

The primary sources of noise at Fort Hunter Liggett are aircraft and outdoor range training. These activities occur on approximately 913 acres, and elevated ambient noise levels, including areas qualifying as Noise Zones II or III, are present. Elevated ambient noise levels are present around the Tusi Army Heliport, Schoonover Airfield, and training ranges, including the Hand Grenade Familiarization Course, Multipurpose Machine Gun Range, and the Light Demolition Range (USARC 2010). A helicopter pad is east of Parcel C. A safety zone associated with this helipad extends over Parcel C. The helicopter pad is used infrequently by the medical clinic during medical emergencies. Other sources of noise are vehicle traffic and landscaping and construction activities.

The project sites and surrounding land are generally undeveloped or moderately developed with residential and administrative facilities; therefore, the average ambient noise level at the project sites are expected to be similar to suburban or urban residential areas that generally do not exceed 65 dBA day-night average sound level (DNL; EPA 1974).<sup>2</sup> The nearest substantial noise sources are the fire department east of Parcel A and the Tusi Army Heliport approximately 0.5 mile north of Parcel C. Schoonover Airfield and the installation's training ranges are more than a mile from the project sites.

Fort Hunter Liggett established noise abatement measures to reduce the impact of operational noise, one of which is relevant to the project sites. This measure states that aircraft flying over the cantonment area must maintain an altitude equal to or greater than 1,000 feet above ground level during nonemergency operations (USARC 2010).

## 3.4.2 Environmental Consequences

### 3.4.2.1 Preferred Alternative

**Compatibility with the Existing Noise Environment.** Parcel A may experience temporary noise from sirens at the adjacent fire department, a continuation of the existing conditions. Parcels B, C, D, and E are approximately 0.5 to 0.75 mile north of Tusi Army Heliport, and helicopters would likely be audible at the project sites. Because of their distance from the project sites and the existing cantonment area overflight noise abatement measure (see Section 3.4.1), existing aircraft and training operations do not substantially influence the average ambient noise level at the project sites. Parcels A, B, D, and E are not in or next to a Noise Zone II or III, thus implementation of the Preferred Alternative would be compatible with the existing ambient noise level.

Noise from helicopter operations at the landing pad east of Parcel C may intermittently be present at Parcel C. Parcel C is not in or next to a Noise Zone II or III; thus, implementation of the Preferred Alternative at Parcel C would be compatible with the existing ambient noise level.

**Construction.** Short-term increases in noise would occur during renovation, construction, and demolition. These activities would include the use of hand and power tools, the operation of construction vehicles, and the voices of construction personnel. During renovation of the existing lodging facility (Parcel A), interior noise could affect occupants. During construction of the new hotel on Parcel B or C and demolition of the lodging facility on Parcel A, noise could affect

---

<sup>2</sup>The DNL is a noise measurement that is the 24-hour weighted average sound level, where a 10-decibel penalty is added to the nighttime sound levels (nighttime hours are defined as 2200 to 0700 hours).

occupants of properties next to the sites. No building modification would occur on Parcels D and E, so no effects on the noise environment are expected.

The nearest sensitive noise receptors are residences north of Parcel A and a chapel east of Parcel B, approximately 75 to 200 feet from the parcels. Noise from a point source decreases approximately 6 decibels for every doubling of distance (World Soundscape Project 1999).<sup>3</sup> Using these metrics and conservatively assuming that construction equipment were on the project site boundary nearest the sensitive noise receptor, Table 3-2 contains the noise level of common construction equipment and the outdoor noise level that may be experienced by these sensitive receptors. The values in Table 3-2 represent noise levels at a particular point; because DNL values are averages, these values would be lower than those in the table. Indoor noise would be less than outdoor levels.

Construction would be limited to normal weekday business hours, to the extent practicable. Construction equipment would be muffled or shrouded if necessary, and the noise would cease when construction was complete, so short-term minor adverse effects on the noise environment are expected.

**Table 3-2  
Construction Noise Estimates**

<b>Equipment Type</b>	<b>Outdoor Noise Level at 50 Feet (dBA)</b>	<b>Outdoor Noise Level at Nearest Sensitive Receptor (75 feet; Decibels)</b>	<b>Outdoor Noise Level at 200 Feet (Decibels)</b>
Bulldozer	80-92	77-89	68-80
Grader	80-93	77-90	68-81
Paver	86-88	83-85	74-76
Truck	83-94	80-91	71-82
Air compressor	75-86	72-83	63-74
Generator	71-82	68-79	59-70
Jackhammer	81-98	78-95	69-86
Pile driver	91-105	89-102	79-93
Compacter (roller)	72-75	69-72	60-63
Backhoe	72-93	69-90	60-81

Source: EPA 1971  
dBA = A-weighted decibels

**Operation.** The new hotel would be somewhat larger than the existing lodging facility and would increase existing vehicle traffic by 35 vehicle trips per day (Institute of Transportation Engineers 2003); see Section 3.10, Transportation, for additional discussion of these trips. These vehicle trips would incrementally increase ambient noise levels near area roads; however, the increase would not be substantial enough to be perceptible to the human ear, so the long-term impacts on the noise environment would be minor adverse.

### 3.4.2.2 No Action Alternative

There would be no noise effects because the existing noise environment would not be altered.

<sup>3</sup>Construction equipment is a point source from which sound propagates outward in a spherical pattern. In the case of spherical spreading from a point source, the sound level is reduced by 6 decibels for each doubling of distance from the source, based on the inverse-square law. Atmospheric factors, such as temperature, humidity, and wind, can also influence sound propagation (World Soundscape Project 1999). The calculations used for Table 3-2 do not take into account atmospheric factors and assume a line of sight (i.e., no barriers) between the source and receptor.

## 3.5 GEOLOGY AND SOILS

The ROI consists of the project site, areas contiguous to the project site, and the Fort Hunter Liggett region.

### 3.5.1 Affected Environment

Geologic and soils resources include underlying geologic formations, surface soils and sediment, geomorphic features (e.g., river channels), earthquake faults and hazards, and the physical terrain and topography. Regional geologic features such as earthquake faults are included because they could have an effect on the project site.

#### 3.5.1.1 Geologic Setting

**Physical Geography.** Fort Hunter Liggett is in the Santa Lucia Mountain Range, in the Coast Range geomorphic province of California. The province is underlain by two series of basement rocks, the Franciscan and the Sur Series. The Sur series is exposed between the San Andreas and Nacimiento fault zones on the western portion of the installation (US Army 2004b).

The geology near the cantonment area consists of Pleistocene alluvium (predominantly sand, with lesser amounts of gravel, silt, and clay) from the ground surface to approximately 43 feet below ground surface. Under the Pleistocene alluvium is the Monterey formation, fractured shale bedrock with some siltstone and sandstone. The Monterey formation extends to an unknown depth (Ahtna Engineering 2010).

**Seismicity.** Although there have not been many earthquakes at Fort Hunter Liggett, the potential for a damaging earthquake should be considered because of the faults in the area. The Jolon, Nacimiento, and several other small faults are nearby. The Rinconada fault traverses the southern end of the San Antonio Reservoir (NPS 2004). Faults near the installation are generally oriented northwest-southeast, paralleling the San Andreas fault 30 miles east of the installation. In 1991, a seismic study by the US Army Corps of Engineers predicted the Rinconada fault could trigger an earthquake up to a 7.5 magnitude on the Richter scale, with rock and ground acceleration ranging from 0.5 to 1.0 gravity (g), near the eastern boundary of Fort Hunter Liggett, to 0.3 g, along the western boundary (NPS 2004). The installation's proximity to the San Andreas and Rinconada faults and other small faults, warrants a Seismic Risk Zone II designation for potential earthquakes resulting in moderate risk to people and structures (US Army 2004b).

**Mineral Resources.** Several abandoned cinnabar, chromite, and gold mines are on Fort Hunter Liggett. Gravel found in valleys is used for operation and maintenance projects (US Army 2004b).

**Soils.** Installation soils reflect the varied geology and topography of the area. More than 130 soil types occur in 57 soil series on Fort Hunter Liggett (US Army 2004b). The three dominant soil parent materials are sedimentary (shale and sandstone), metamorphosed sedimentary, and granitic rocks. Soils on slopes at Fort Hunter Liggett are classed as moderately to highly erodible. For example, the steep topography of the surrounding mountains is highly erodible and more hazardous, compared with the San Antonio River Valley floor that includes the cantonment area; here, erosion hazards are minimal because of the nearly flat topography (NPS 2004). Slopes in the cantonment area are typically less than 20 percent (US Army 2004b).

**Prime Farmland.** Prime farmland soils are protected under the Farmland Protection Policy Act (FPPA) of 1981. The FPPA ensures that federal programs are administered in a manner that, to the extent practicable, is compatible with private, state, and local government programs and

policies to protect farmland. The intent of the FPPA is to minimize unnecessary or irreversible alteration of farmland soils from nonagricultural uses.

The Natural Resources Conservation Service (NRCS) oversees compliance with the FPPA and has developed rules and regulations for implementing the act (Title 7 of the CFR, Part 658). According to the FPPA, "Prime Farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides and labor, and without intolerable soil erosion. Prime farmland includes land that possesses the above characteristics but is being used currently to produce livestock and timber. It does not include land already in or committed to urban development or water storage."

None of the land in the ROI is considered prime farmland. The soils are classified as grazing land, urban and built-up land, and other land (CDC 2011); therefore, a Farmland Conversion Impact Rating (Form AD-1006) of the project area is not warranted, and no further action is required under the FPPA.

## **3.5.2 Environmental Consequences**

### **3.5.2.1 Preferred Alternative**

No effects on geology, mineral resources, or prime farmland would occur from implementing the Preferred Alternative except for, short-term, minor, adverse effects on soils. Soil disturbance and possibly some soil erosion would occur during construction, but would be minimized by the use of appropriate BMPs for controlling runoff, erosion, and sedimentation. Rest Easy would be required to prepare and abide by a stormwater pollution prevention plan (SWPPP) and all regulations, including those pertaining to sediment retention and soil stabilization; this requirement is further detailed in Section 3.6.2.1. There are no long-term effects on geology and soils expected from operating the new hotel.

### **3.5.2.2 No Action Alternative**

No effects on geology or soils are expected, and no ground would be disturbed under the No Action Alternative.

## **3.6 WATER RESOURCES**

### **3.6.1 Affected Environment**

**Climate.** The climate of the area is Mediterranean and is generally semiarid. Precipitation falls primarily as rain, mostly between November and April or May and is followed by a dry period lasting six to seven months. The cantonment area averages about 19 inches annually (NPS 2007).

**Surface Water.** Fort Hunter Liggett occupies land in the upper watersheds of both the San Antonio and Nacimiento Rivers. These distinctly linear drainages are about five miles apart and flow southeast. Flow regimes of all surface water on the installation are seasonal. In summer, almost no water flows to the cantonment area or in the San Antonio River; however, spring-fed middle reaches of this river, upstream of the cantonment area, have some year-round water (Central Coast Salmon Enhancement, Inc. 2008). The uppermost 2.5 miles of the 17-mile long San Antonio Reservoir is in the southeast corner of the installation. This area has the lowest elevation in Fort Hunter Liggett, about 800 feet. The upper reaches of the Nacimiento Reservoir are several miles outside and south of the installation. Below the reservoirs, both rivers drain into

the Salinas River that flows northwest, in the opposite direction of the main rivers in Fort Hunter Liggett, and eventually empties into Monterey Bay (NPS 2007). A small drainage ditch near the site carries stormwater, eventually to the San Antonio River. The Water Quality Control Plan for the Central Coast Basin (Basin Plan, Central Coast Regional Water Quality Control Board 2011) guides the management of surface water and ground water quality within the Central Coast Region, which includes Fort Hunter Liggett.

**Groundwater.** The Jolon-Lockwood Ground Water Basin is composed of a northwesterly trending valley in the Coast Range Mountains of Monterey County west of the Salinas Valley. The basin extends from Lake San Antonio in the southeast to the Fort Hunter Liggett cantonment area in the northwest. About half the basin is on the installation, and most of that portion is underneath an artillery firing range. The elevation ranges from 800 to 1,200 feet (Central Coast Salmon Enhancement, Inc. 2008). A groundwater aquifer near the project area is 8 to 40 feet below the ground surface (Ahtna Engineering 2010).

**Floodplains.** As shown in Figure 3-1, a portion of the western corner of Parcel C and a portion of the northwest corner of Parcel B are in the Zone A floodplain, as designated by the Federal Emergency Management Agency (FEMA 2009).

## 3.6.2 Environmental Consequences

### 3.6.2.1 Preferred Alternative

Construction and operation of the new hotel under the Preferred Alternative would have minor adverse effects on water resources.

Construction could affect surface water quality in the short term by discharging sediment (and pollutants bound to sediment) and other pollutants associated with construction, such as trash, paint, solvents, sanitary waste from portable restrooms, and concrete curing compounds. The discharge of these pollutants during construction could impair surface flows into the San Antonio River. Because site construction would exceed one acre, the project would require coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002 (Construction General Permit). To obtain coverage under the Construction General Permit, the project applicant must provide, by electronic submittal, a notice of intent, an SWPPP, and other documents required by Attachment B of the Construction General Permit. Activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as grubbing or excavation. The permit also covers linear underground and overhead projects such as pipeline installations. Construction activities covered under the Construction General Permit are regulated at the local level by the Central Coast Regional Water Quality Control Board (Regional Board).

The Construction General Permit exercises a risk-based permitting approach and mandates certain requirements based on the risk level of the project (Level 1, Level 2, or Level 3). The risk levels are based on the risk of sediment discharge and the risk to the receiving water. The sediment discharge risk depends on the project location and timing (i.e., wet season versus dry season activities). The receiving water risk depends on whether the project would discharge to a sediment-sensitive receiving water, defined by specific beneficial uses of the receiving water in the Basin Plan (i.e., cold freshwater habitat, fish migration, and fish spawning), a listing on the 303(d) list due to sediment impairment, or a Total Maximum Daily Load in place to address excessive sedimentation. Most construction projects in the state are assigned a Risk Level of 2.

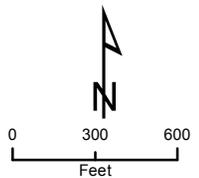


R:\New\28031\GIS\Layouts\100-year Floodplain - Fort Hunter Liggett.mxd - 07.05.12 - YE

Note: Parcel boundaries to be revised following completion of the metes and bounds survey.

### 100-year Floodplain

Fort Hunter Liggett, California



- Parcel A
- Parcel B
- Parcel C
- Parcel D
- Parcel E
- 100-year Flood Zones

**Figure 3-1**

Source: Aerial - 2010 Microsoft Corporation and its data suppliers.

The performance standard in the Construction General Permit is that dischargers shall minimize or prevent pollutants in stormwater discharges and authorized discharges unrelated to stormwater. This would be accomplished through the use of controls, structures, and management practices that achieve best available technology (BAT) for treatment of toxic and nonconventional pollutants and best conventional technology (BCT) for treatment of conventional pollutants.<sup>4</sup> The permit also imposes numeric action levels (Level 2 and Level 3 projects) and numeric effluent limits (Level 3 projects) for pH and turbidity, and minimum BMPs that must be implemented at all sites.

The construction SWPPP would be prepared by a qualified SWPPP developer that meets the certification requirements in the Construction General Permit. The SWPPP would require that:

- All pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction would be controlled;
- Where not otherwise required to be under a Regional Board permit, all discharges unrelated to stormwater would be identified and eliminated, controlled, or treated;
- Site BMPs would be effective and would reduce or eliminate pollutants in stormwater discharges and authorized discharges unrelated to stormwater from construction to the BAT/BCT standard;
- Calculations and design details, as well as BMP controls for site run-on, would be complete and correct; and
- Stabilization BMPs would be installed after construction to reduce or eliminate pollutants.

The SWPPP would include BMPs for:

- Erosion control (including wind erosion) and tracking controls,
- Sediment control,
- Controls for discharge unrelated to stormwater (e.g., water from vehicle and equipment cleaning), and
- Waste management and materials pollution control.

A groundwater aquifer 8 to 40 feet deep is near the site. Dewatering would likely not be required, but the SWPPP would include a dewatering plan for groundwater. No contaminated groundwater would be discharged to the stormwater drainage system during construction. Construction would not have any other effect on groundwater. Compliance with the Construction General Permit, including SWPPP preparation and BMP implementation, would meet water quality standards and reduce short-term impacts on surface water quality from construction to a minor adverse level.

Operation (post-construction phase) of the Preferred Alternative may adversely affect water quality. The Preferred Alternative would increase site impervious area, thereby increasing the frequency, duration, and volume of runoff. Because of the change in land use, an increase in

---

<sup>4</sup>As defined by the EPA, BAT is a technology-based standard established by the Clean Water Act as the most appropriate means available on a national basis for controlling the direct discharge of toxic and nonconventional pollutants to navigable waters. The BAT effluent limitations guidelines, in general, represent the best existing performance of treatment technologies that are economically achievable. BCT is a technology-based standard that applies to treatment of conventional pollutants, such as total suspended solids.

pollutant loading from runoff may be expected. Development at Fort Hunter Liggett must comply with the post-construction stormwater management requirements mandated by Section 438 of the Energy Independence and Security Act (EISA). EISA requires replication of predevelopment hydrology (with respect to temperature, rate, volume, and duration of flow) for any development or redevelopment project that exceeds 5,000 square feet. EISA allows for two compliance methods: (1) retain all runoff from the site up to the 95th percentile rainfall, or (2) do a site-specific hydrologic analysis of pre-project runoff conditions and design stormwater management controls to preserve pre-project hydrology. The US Environmental Protection Agency (EPA) recommends the use of green infrastructure or low impact development to meet the requirements of EISA; examples include bioretention areas, vegetated swales, and rainwater harvesting and reuse. Because the Preferred Alternative would comply with EISA, water quality standards for receiving waters would be met, and long-term effects on water quality would be minor adverse.

The Preferred Alternative would not alter the existing flow direction of surface water or groundwater. Site grading at Parcels A, D, and E would not be extensive and would not alter drainage patterns; site runoff would discharge to an on-site stormwater drainage system, similar to the existing condition.

Major site grading at Parcels B and C would alter drainage patterns on those sites. Runoff during construction would be controlled as defined in the SWPPP. Following development, site runoff would discharge into installed stormwater drainage systems.

Operational activities would not access groundwater, so groundwater extraction would not increase with implementation of the project. Potable water would continue to be provided by the local municipal water purveyor. Local potable water sources include surface water and groundwater resources. Potable water use for irrigation may increase, but is expected to be minor because the site would be composed predominantly of impervious materials.

The Preferred Alternative would not increase the potential for flooding. Portions of Parcels B and C are in a Zone A floodplain. To avoid flooding impacts, no structures would be constructed in the floodplain, and site grading would be designed to avoid expanding the floodplain boundary. Grading and fill activities in and adjacent to the floodplain could redirect and increase flows to the San Antonio River, resulting in the potential for increased erosion or alignment modification. Due to the small area of the 100-year floodplain in the project footprint, construction and operation would result in minor adverse impacts on floodplain function.

### **3.6.2.2 No Action Alternative**

No effects on water resources are expected under the No Action Alternative because existing conditions affecting water resources would not be altered.

## **3.7 BIOLOGICAL RESOURCES**

### **3.7.1 Affected Environment**

The Preferred Alternative would occur in a small portion of the cantonment area near existing buildings or previously disturbed areas including grassland communities. For this EA, the ROI includes lands in and near the project area that could be affected by the Preferred Alternative.

The Preferred Alternative would occur on five parcels: Gibb Hall (Parcel A), New Build Site (Parcel B), New Build Site (Parcel C), Building 196 (Parcel D), and Building 168B (Parcel E).

Parcel A is approximately 3.66 acres and includes Army Lodging Building 128, Gibb Hall. Asphalt parking areas or roadways surround the building, except for a small area at the northwest end of the building. Adjacent to Parcel A is development on the east, south, and north and undeveloped land covered in vegetation on the west.

Parcel B is approximately 9.12 acres. Its northwest half is mostly undeveloped and covered with vegetation, primarily grass, weeds, and wildflowers. Light development includes a small car wash and an electrical hookup station for mobile food trucks. Its southern half is being used as a motor pool, accessed by a dirt roadway along the parcel's east border. Adjacent to Parcel B is development to the north and east, undeveloped land to the west, and a portion of the motor pool to the south.

Parcel C is approximately 10.43 acres. It includes a running track and a dirt road oriented in a north-south direction. Parcel C is mostly undeveloped and covered with grass and weeds with a large tree near its north border. Next to Parcel C is development on the north, east, and south and undeveloped land and Mission Road on the west. A drainage ditch is north and northwest of the parcel. Water from this ditch drains into the San Antonio River.

Parcel D is an approximately 1,800-square-foot portion of Building 196. Parcel E is an approximately 3,200 square-foot portion of the Building 168B warehouse. Under the Preferred Alternative, only the interiors of these buildings would be used. As such, use of these parcels would not affect biological resources, and they are not further evaluated in this section.

**Vegetation.** The two main habitats in the ROI are grassland and developed lands (roads, buildings and structures). In the locations of the Preferred Alternative, Parcels B and C support annual grasslands and previously disturbed land. One large oak tree is on Parcel C, and Parcel A has some ornamental and landscaped vegetation.

**Wildlife.** The ROI is not likely to support a wide variety of wildlife species, due to the high level of disturbance, soil compaction, and human use and development. Common species expected to occur on the sites are western blue-bird (*Sialia mexicana*), acorn woodpecker (*Melanerpes formicivorus*), band-tailed pigeon (*Columba fasciata*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), yellow-billed magpie (*Pica nuttalli*), barn swallow (*Hirundo rustica*), American robin (*Turdus migratorius*), desert cottontail (*Sylvilagus auduboni*), and California ground squirrel (*Spermophilus beecheyi*) (USACE 2006).

**Sensitive Habitat.** No sensitive habitat, including critical habitat, is present on any of the project parcels; there is no critical habitat present on Fort Hunter Liggett.

**Special Status Species.** Special status species are those listed by the federal or state government as migratory, threatened, or endangered under applicable regulations, or species proposed for listing, are candidates for listing, or are state species of special concern. Plants included on the California Native Plant Society (CNPS) List 1 (threatened or endangered within California) or CNPS List 2 (may be threatened in California, but more common elsewhere) are considered to have special status.

Federally listed species on Fort Hunter Liggett are San Joaquin kit fox (*Vulpes macrotis mutica*), purple amole (*Chlorogalum purpureum* var. *purpureum*), arroyo toad (*Anaxyrus californicus*), vernal pool fairy shrimp (*Branchinecta lynchi*), and California condor (*Gymnogyps californianus*). Bald eagles (*Haliaeetus leucocephalus*) have been removed from the Endangered Species List; however, protection continues under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

The Fort Hunter Liggett cantonment area in the vicinity of the project parcels provides some areas of potential San Joaquin kit fox habitat and known purple amole and vernal pool fairy shrimp sites; none of these species is known or expected to occur on the project parcels. Habitat for San Joaquin kit fox is limited in the cantonment area due to roads and development. The species inhabits grasslands, scrublands, oak woodlands, and vernal pool areas in the California Central Valley floor and the interior coastal ranges (US Army 2011). The most recent kit fox sighting near Fort Hunter Liggett occurred in 2000 (CDFG 2012); surveys are done at least twice a year. Purple amole and vernal pool fairy shrimp are known to occur in the cantonment area, but have not been identified on the project sites.

California condors and bald eagles could forage in the cantonment area, but food resources for them are limited. Bald eagles have been sighted foraging and perching in the cantonment area in riparian and upland habitat (USARC 2004). Due to the limited number of trees in the project site, the potential for condor or bald eagle nesting is low.

Arroyo toad breeding habitat is present along the San Antonio River, beyond the cantonment area perimeter fence and approximately 0.5 mile from Parcels A, B, and C. When conditions are cool and moist, burrowing habitat may be available under oak trees in upland sites where soils are more friable and a litter layer is available. Ground fog during the summer is uncommon in the San Antonio Valley, and moist substrates in upland habitats are scarce (USARC 2004). Due to the lack of suitable upland or breeding habitat on the sites, the potential for arroyo toads to occur on the project sites is low.

## **3.7.2 Environmental Consequences**

### **3.7.2.1 Preferred Alternative**

Impacts on vegetation would be significant if the Proposed Action were to result in a loss of any single vegetation community or the inability to restore that habitat type in or near the project site. Impacts on wildlife would be significant if the Preferred Alternative were to fragment populations or their movement in or near the project sites. Impacts on special status species would be significant if the Preferred Alternative were to result in the unlawful loss of federally listed species, if it were to jeopardize the survival or recovery of a federally listed species, or if it were to result in the adverse modification of critical habitat. Impacts on migratory birds would be significant if the Preferred Alternative were to result in unlawful loss of federally protected migratory birds. Impacts on rare plants would be significant if the Preferred Alternative were to result in the need for federal or state listing of a plant species.

The Preferred Alternative would disturb an area surrounded by development and previously disturbed habitat in the fenced cantonment area. No federally listed species would be jeopardized because no listed species are known to occur in or to depend on the project sites. Construction could disturb nesting birds protected by the Migratory Bird Treaty Act, and construction on Parcel C could remove trees in which birds are nesting. Where vegetation could be disturbed by demolition and construction, surveys for nesting migratory birds would be performed before vegetation was disturbed. Construction and development would be closely monitored from March 1 to August 31 to avoid adverse effects on breeding migratory birds. The Fort Hunter Liggett Environmental Division would evaluate the survey results and would coordinate with Rest Easy representatives to ensure construction would not have any adverse effects on migratory birds. If any oak trees are impacted or removed, they would be replaced at a 3:1 ratio with the same species as seedlings or saplings that are at least 2 feet tall. Following construction, the operational impacts of the new development would not create any additional adverse impacts on listed species or sensitive habitats. The sites for demolition and construction are currently developed or

do not contain any sensitive biological resource habitat. As a result, the Preferred Alternative is expected to have minor adverse effects on biological resources.

### **3.7.2.2 No Action Alternative**

No effects on biological resources are expected under the No Action Alternative. No ground would be disturbed or vegetation removed, so no vegetation, wildlife, or special status species would be disturbed.

## **3.8 CULTURAL RESOURCES**

### **3.8.1 Affected Environment**

Cultural resources are historic properties (buildings, structures, districts, and landscapes, as defined by the National Historic Preservation Act [NHPA]), Native American sites, archaeological sites, districts, and objects that are eligible for or that are listed on the National Register of Historic Places (NRHP); cultural items, as defined in the Native American Graves Protection and Repatriation Act of 1990; Native American sites for which access is protected under the American Indian Religious Freedom Act of 1978; archaeological resources, as defined by the Archaeological Resources Protection Act of 1979 and Antiquities Act of 1906 and Army Regulation 200-1; and archaeological artifact collections and associated records, as defined by 36 CFR, Part 79. As such, the ROI for the Preferred Alternative is the project sites, project depths, viewsheds of the project sites, and adjacent properties.

The most recent Fort Hunter Liggett Integrated Cultural Resources Management Plan (ICRMP) was prepared in 2003 (USAR 2003). The ICRMP interfaces with the Fort Hunter Liggett mission, ensuring that mission-essential activities are supported by the management policies and procedures outlined in the ICRMP. The ICRMP is based on information derived from historical, archaeological, ethnographic, and architectural investigations, (including associated historical contexts), in the installation. It specifies management strategies for known historic properties and methods for identifying and evaluating currently unknown properties. The Cultural Resources Program (CRP) staff will follow these strategies and methods in identifying, consulting, evaluating, treating, reporting, and managing all historic properties (USARC 2003).

More than 100 cultural resources studies in history, archaeology, architectural history, and ethnography have been done at Fort Hunter Liggett. Approximately 45 percent of the installation has been inventoried for cultural resources, including areas subject to regular installation activity and many areas with a high probability for containing cultural resources. The results of these studies provide the framework for understanding the cultural and historical development at the installation and the surrounding region (USARC 2010).

#### **3.8.1.1 Archaeological Resources**

Approximately half of the lands under Fort Hunter Liggett's jurisdiction has been inventoried for cultural resources, and 660 archaeological sites have been documented. Of these, 548 contain prehistoric cultural components, 112 contain historic cultural components, and 47 contain both historic and prehistoric components. Prehistoric site types include the remains of villages, bedrock milling sites, task-specific sites, rock shelters, rock art sites, chert quarries, and sparse lithic scatters. Historic site types include communities, ranches, mines, military sites, structural remains (such as those manufactured from adobe), refuse scatters, water management sites, privies, linear features, exotic vegetation, roads, trails, cemeteries, settings, and small-scale landscapes (USARC 2010).

The ROI is in the 1,078-acre cantonment area. The two recorded archaeological sites in this area are the Hacienda and the historic El Camino Real. The entire area of the cantonment area was surveyed in 1980 by Zahniser and Roberts, and Parcels A, B, and C were field checked in 2012 by the installation cultural resources staff (Cipolla 2012; Zahniser and Roberts 1980). Based on those studies, there are no known archaeological resources in the ROI.

### **3.8.1.2 Native American Resources and Traditional Significant Resources**

Resources of traditional, religious, or cultural significance to Native American tribes can be archaeological resources, sacred sites, structures, neighborhoods, prominent topographic features, habitat, plants, animals, and minerals that Native Americans consider essential for the preservation of traditional culture.

One property of cultural significance is listed on the NRHP, La Cueva Pintada (CA-MNT-256). More than 100 other archaeological sites might meet the criteria, as defined by the NHPA, for properties of traditional religious and cultural importance on completion of formal evaluation. These sites generally consist of rock shelters, cupules (cup-shaped plant parts, such as an acorn encasing), pictographs, traditional gathering locations, ceremonial landscapes, and burial grounds. There are no Native American resources or traditional significant resources in or next to the ROI.

### **3.8.1.3 Built Environment Resources**

There are six buildings or structures within the installation boundary that are listed on the NRHP. Fort Hunter Liggett owns two of these buildings, the Jose Maria Gil Adobe (CA-MNT-963H), which is not located near the ROI for this project, and the Milpitas Ranch House (also known as the Hacienda, CA-MNT-940H). The other four NRHP-listed buildings are located on inholdings.

Two historic properties are next to or in the ROI: the Hacienda and Mission San Antonio de Padua. The Hacienda was designed by architect Julia Morgan for the owner, William Randolph Hearst. It later was a military headquarters and nearby buildings were used as barracks, storage facilities, maintenance buildings, and housing. Although the Hacienda is a notable example of Mission style architecture, it is also described as Julia Morgan's interpretation of Spanish Colonial style of architecture (Bio Systems Analysis, Inc. 1992). The Hacienda is listed on the NRHP for its significance under Criterion B and for its association with architect Julia Morgan and owner William Randolph Hearst. The house was designed to fit in with the architectural style of the nearby Mission San Antonio de Padua (McNeill 1976).

Mission San Antonio de Padua, near the cantonment area, was founded in 1771 as the third Spanish mission established in California. In 1991, the US Congress passed legislation prohibiting aboveground construction in a building restriction zone around Mission San Antonio de Padua to maintain a viewshed buffer. The Mission is listed on the NRHP and is on a private inholding near the cantonment area. None of the parcels are in this building restriction zone, but Parcel C is in the historic viewshed of the Mission.

Parcel A is paved. Historical aerial maps and photographs indicate the presence of Army temporary structures on the parcel from 1949 through 1968. There do not appear to have been earlier structures on Parcel A. It is 1,000 feet from the Hacienda and contains Building 128, Gibb Hall, constructed in 1970.

Parcel B is partially paved and disturbed from recent Army activity. It is along Infantry Road, on the same street as the Hacienda. There do not appear to have been structures on this parcel in the past, and no structures are present.

Parcel C is an open field with a dirt running track. It does not appear that any structures were on this parcel historically.

Parcel D contains Building 196, constructed in 1956. It has not been evaluated for eligibility for listing on the NRHP (Cipolla 2012). The building is currently used for lodging front desk and administration and storage.

Parcel E contains Building 168B, a 3,200 square-foot portion of which Army Lodging uses for storage. It was constructed in 1961 and has not been evaluated for eligibility for listing on the NRHP (Cipolla 2012).

### 3.8.2 Environmental Consequences

In accordance with 36 CFR, Part 800, the implementing regulations for the NHPA, an adverse effect on cultural resources is found when the proposed action may alter, directly or indirectly, any of the characteristics of a historic property that qualify it for listing on the NRHP in a manner that would diminish the integrity of a property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects can include reasonably foreseeable effects caused by a proposed action that occur later or farther removed or that are cumulative.

Adverse effects on historic properties include:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR, Part 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features in its setting that contribute to its historic significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features; or
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

For the purposes of this PAL analysis, impacts on cultural resources are considered significant if prehistoric or historic resources that are eligible for listing or are formally listed on the NRHP are disturbed or destroyed. Direct impacts are those in which project activities disturb or destroy the integrity of NRHP-listed or NRHP-eligible cultural resources, including changes to the historic setting or viewshed of a property. This can include ground-disturbing activities, noise or other vibrations, renovation, or removal. Indirect impacts are those that may occur at a point later in time but that can be reasonably predicted at the time of project implementation.

A significant adverse impact also could occur if the project proponents were not to abide by the established management documents, such as the ICRMP, or agreement documents, such as a programmatic agreement and specified lease provisions.

Fort Hunter Liggett will coordinate with California State Historic Preservation Office (SHPO) regarding concurrence of the finding of no adverse effects, in accordance with Section 106 of the NHPA. This coordination would address, in part, impacts to the Mission San Antonio de Padua viewshed; mitigation measures, such as the use of buffer planting, would be proposed as necessary to minimize adverse effects.

### 3.8.2.1 Preferred Alternative

**Archaeological Resources.** No archaeological resources have been identified on Parcels A, B, C, D, or E. A provision would be included in Exhibit E of the ground lease, “Accidental or Inadvertent Discoveries of Historic Properties.” This lease provision would follow Section 4.5.3 in the ICRMP that establishes steps to be taken when potential archaeological resources are accidentally discovered when the ground is disturbed. Rest Easy would fully comply with management measures identified in the ICRMP and the lease documents.

Potential risk to cultural resources under the Preferred Alternative is moderate to high, depending on the activity and cultural site type, so ground-disturbing activities and aboveground construction would be subject to coordination requirements of the NHPA Section 106 guidelines. All activities, including military training and facility operations in or near the regulated area north of Mission San Antonio de Padua, would be done in accordance with NHPA Section 106 and Section 2851 National Defense Authorization Act for Fiscal Years 1992 and 1993. Under the Preferred Alternative there would be minor adverse impacts on archaeological resources.

**Native American and Traditional Cultural Resources.** No adverse effects on Native American or traditional cultural resources are expected from implementing the Preferred Alternative. The involved parcels contain no NRHP-eligible archaeological sites or any identified resources of significance to a Native American tribe.

There are currently no federally recognized tribes associated with Fort Hunter Liggett lands. Consultation will be conducted with the SHPO and interested parties, to include local non-federally recognized tribal members.

**Built Environment Resources.** Under the Preferred Alternative, Gibb Hall on Parcel A would be conveyed to Rest Easy and would be used during the IDP to maintain an appropriate number of available rooms while new lodging was being built. At the end of the IDP or as the new hotel became operational, the building would either be returned to the Army for conversion to other use unrelated to lodging, or it would be demolished by Rest Easy and the land would revert to Fort Hunter Liggett. For this analysis, this EA assumes that the building would be demolished. Because Gibb Hall was constructed in 1970, it is not historic, and the impacts of demolition would be minor adverse. Gibb Hall is not architecturally sympathetic to the area surrounding it. Its architectural style and design are not compatible with the Hacienda or the overall architectural environment of the installation. Although Gibb Hall is less than 50 years old and currently not considered historic, the Army and Rest Easy would conduct a formal evaluation of the building to determine its eligibility for listing in the NRHP prior to demolition of the building. If Gibb Hall is determined eligible, effects resulting from the Preferred Alternative would be addressed through Section 106 consultation with the SHPO. Through evaluation and consultation, the effects of the Preferred Alternative on Gibb Hall would be minor adverse.

Under the Preferred Alternative, Rest Easy would construct the new hotel on Parcel B or Parcel C. Siting the new facility on Parcel B could cause an adverse effect on a historic property because Parcel B is not far from the Hacienda. Siting a new building in the neighborhood of a historic property could compromise the character of the property's setting that contributes to its historic significance. This also could introduce visual elements that diminish the integrity of the Hacienda's significant historic features.

**Parcel B.** Construction of new lodging on Parcel B could have an adverse effect on the Hacienda if the architectural style of the new construction were not sympathetic or complementary to that of the Hacienda. It would therefore diminish the historic setting, feeling, and association of the property because Parcel B is along the same road and in the neighborhood of the historic Hacienda. To reduce the adverse impact on this historic property, the architectural style of the new building would be sympathetic and complementary to that of the historic property. The project proponent would follow the design guidelines in the IDG to ensure that the construction does not adversely affect the Hacienda. The goal of the building designer should be to blend the new building with its surroundings and achieve a cohesive appearance on the installation. As stated in the IDG, "the historic Hacienda sets the aesthetic tone for the installation. Many buildings have been built to emulate the Hacienda's architectural style and color palette. This theme should be continued and extrapolated to all future construction projects at the installation." The design of the new lodging should follow, as stipulated in the IDG, the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, published by the US Department of the Interior to protect the overarching Hacienda style. Incorporation of the IDG standards into the new hotel would avoid the possibility of significant adverse effects resulting in minor adverse effects on architectural resources from the Preferred Alternative.

As shown on Figures 3-2 through 3-4, each taken from three different locations on the Mission property to analyze potential effects to the viewshed, a new hotel on Parcel B would be not be visible from the Mission San Antonio de Padua, so no effects on the historic Mission would result.

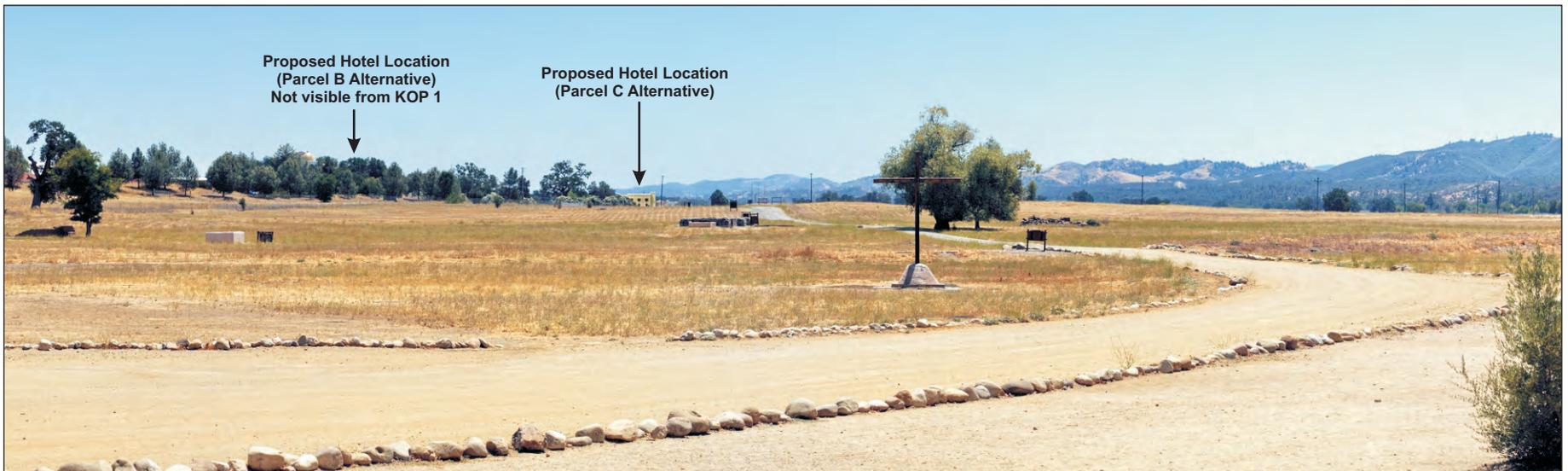
**Parcel C.** Rest Easy may construct the lodging facility on Parcel C. Adverse effects from the Preferred Alternative could occur if the facility were sited on Parcel C because it is in the historic viewshed of Mission San Antonio de Padua (Site CA-MNT-100H) that is listed on the NRHP. Siting new a new structure in the historic viewshed of the Mission could compromise the historic integrity of the setting of buildings and structures associated with the Mission.

As shown on Figures 3-2 through 3-4, visual simulations were prepared for the Preferred Alternative to illustrate anticipated changes in views from the Mission. The visual simulations were conducted by inserting a digitally-created, three dimensional rendering of the new hotel onto photographs of Parcel C, as viewed from three different locations at the Mission, looking toward Parcel C. This visual simulation shows that portions of the new hotel would be visible in the distance when viewed from the Mission. Because the new hotel will be constructed as a two-story structure approximately 35 feet high and will be designed following the IDG, the new hotel will not impact the Mission's historic viewshed. Rest Easy would follow guidance in the IDG to create a buffer between the hotel and the Mission, such as the use of buffer planting to screen the view of the hotel from the Mission. Implementation of the IDG when designing the new hotel would result in minor adverse impacts on historical architectural resources, including the Mission's historic viewshed, from the Preferred Alternative.

**Parcel D.** Parcel D contains Building 196, constructed in 1956. The building has not been evaluated for NRHP eligibility, but, under the Proposed Action, only the front desk area, administrative offices, and storage space would be used. Once the new lodging is completed, Rest Easy would no longer lease the building. These activities would not alter the exterior of the building, so there would be no impacts on the building from the Preferred Alternative.



View to the southeast from key observation point 1 depicting existing conditions. Photo taken 8/1/2012.



Visual simulation of proposed hotel location - Parcel C Alternative

### ***Key Observation Point 1 Visual Simulation***

Fort Hunter Liggett, California



View to the southeast from key observation point 2 depicting existing conditions. Photo taken 8/1/2012.



Visual simulation of proposed hotel location - Parcel C Alternative

### Key Observation Point 2 Visual Simulation

Fort Hunter Liggett, California



View to the southeast from key observation point 3 depicting existing conditions. Photo taken 8/1/2012.



Visual simulation of proposed hotel location - Parcel C Alternative

### ***Key Observation Point 3 Visual Simulation***

Fort Hunter Liggett, California

**Parcel E.** Parcel E contains Building 168B, which was constructed in 1961. The building has not been evaluated for NRHP eligibility, but under the Preferred Alternative, no major modifications to the building's interior or exterior would be made, and once the new lodging is completed, Rest Easy would no longer lease the building so there would be no impacts on the building from the Preferred Alternative.

### 3.8.2.2 No Action Alternative

No effects on cultural resources are expected under the No Action Alternative. All Army actions affecting the involved parcels would conform to installation policies, the ICRMP, and relevant regulatory frameworks.

## 3.9 SOCIOECONOMICS

This section is an analysis of social and economic resources, including a discussion of current social and economic data relevant to Fort Hunter Liggett and Monterey County, which is defined as the ROI for this analysis. Discussed in this section are community characteristics, including population, housing, employment, and economic trends taking place in the project area. Data for California and the United States provide a comparative discussion when analyzed against the ROI. Information in this section was obtained from various sources, including the US Census Bureau, the US Bureau of Economic Analysis, US Bureau of Labor Statistics, and the State of California Department of Finance.

### 3.9.1 Affected Environment

#### 3.9.1.1 Population

Historic, current, and projected population counts in the project area, compared to the state, are in Table 3-3. According to the US Census Bureau, the population of Monterey County was 401,762 in 2000 and 415,057 in 2010, a 3.3 percent increase. The increase in total population in California between 2000 and 2010 was 10.0 percent. Between 2010 and 2020 growth in Monterey County is forecast to be lower than that of the state but greater than the previous 10 years, and growth in the country as a whole would be lower than in the previous 10 years.

**Table 3-3  
Population Characteristics**

Location	2000 <sup>1</sup>	2010 <sup>2</sup>	Percent Change 2000-2010	2020	Percent Change 2010-2020
Monterey County	401,762	415,057	3.3	476,642 <sup>3</sup>	14.8
State of California	33,871,648	37,253,956	10.0	44,135,923 <sup>3</sup>	18.5
United States	281,421,906	308,745,538	9.7	334,123,000 <sup>4</sup>	8.2

Sources: <sup>1</sup>US Census Bureau 2000, <sup>2</sup>US Census Bureau 2010a; <sup>3</sup>State of California, Department of Finance 2007; <sup>4</sup>US Census Bureau, Population Division 2009

#### 3.9.1.2 Employment

Total full-time and part-time employment in Monterey County in 2009 was approximately 219,364, a 0.74 percent decrease from the 220,993 in 2000. Government and government enterprises is the largest employment sector in Monterey County, employing 36,920; 14.4 percent (5,345) were employed in the civilian federal government, 15.0 percent (5,524) in the military, and 70.6 percent (26,051) in state and local government. Other major industries in the county are forestry, accommodation and food services, and retail trade (US Bureau of Economic Analysis 2010, 2011b).

In 2011, the annual unemployment rate in Monterey County was 12.4 percent, which is higher than the rate for California at 11.7 percent (US Bureau of Labor Statistics 2012). As of the third quarter of fiscal year 2012, the Fort Hunter Liggett major tenants included 309 civilians, 179 contractors, 46 full-time military, 22 military technicians, and 327 temporary duty military personnel. There were more than 1,850 transient training Soldiers, as well as additional Soldiers attending classroom training and minor tenants. For the 2011 fiscal year, 110 student FTEs attended classes at Fort Hunter Liggett (US Army 2012).

### 3.9.1.3 Housing and Lodging

Housing supply figures for Monterey County and California are in Table 3-4. At the time of the 2010 census, there were 139,148 housing units in Monterey County, with about 9.4 percent of (13,102 units) vacant. The housing supply has increased in Monterey County by less than half the rate of the state as a whole. In Monterey County, there were 3,182 housing units vacant and for rent, 1,676 vacant housing units for sale, 5,158 vacant housing units for seasonal, recreational, or occasional use, 51 vacant units for migratory workers, and 2,420 other vacant units (US Census Bureau 2010b).

**Table 3-4  
Housing Supply**

<b>Year</b>	<b>Monterey County</b>	<b>Percent Change Monterey County</b>	<b>California</b>	<b>Percent Change California</b>
2000	131,708	--	12,214,549	--
2010	139,148	5.6	13,680,081	12.0

Source: US Census Bureau 2010b

Gibb Hall, Building 128, with four family suites and 46 extended-stay rooms, is the only designated lodging facility on Fort Hunter Liggett. Between fiscal year (FY) 2001 and FY 2006, the annual average demand for housing at Fort Hunter Liggett was 11,424 room nights. The installation accommodated an average of 10,724 room nights, and an average of 701 certificates of nonavailability was issued. The average occupancy rate over the six-year period was 58.1 percent. Between FY 2004 and FY 2006, demand for housing fluctuated, peaking in FY 2003 and reaching its lowest level in FY 2005. Fort Hunter Liggett's demand is driven by the training and education requirements of reservist Soldiers and the accommodation requirements of staff (Jones Lang Lasalle undated).

### 3.9.1.4 Local Economy

According to the Bureau of Economic Analysis, per capita personal income for Monterey County increased by 32.2 percent, from \$31,558 in 2000 to \$41,735, in 2009. This was slightly lower than the state per capita income of \$42,395 in 2009 (US Bureau of Economic Analysis 2011b). According to the US Census Small Area Income and Poverty Estimates, median household income for Monterey County in 2010 was \$53,735, which is 93.2 percent of the state median household income of \$57,664 (US Census Bureau 2011).

### 3.9.1.5 Environmental Justice and the Protection of Children

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, and its accompanying memorandum have the primary purpose of ensuring fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental

laws, regulations, and policies. As such, each federal agency must identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations. Fort Hunter Liggett is in Monterey County, where the racial minority population was 44.4 percent of the total population; this was slightly greater than the state average of 42.4 percent. The Hispanic percentage of the population in Monterey County (55.4 percent) was greater than the State average of 37.6 percent (US Census Bureau 2010a). The presence of minority and Hispanic populations in Monterey County may not be reflected in the area immediately surrounding Fort Hunter Liggett. It does not indicate that actions taken at this facility would result in adverse effects or disproportionately adverse effects on these populations.

EO 13045, Protection of Children from Environmental Health Risks and Safety Risks, directs each federal agency to prioritize identifying and assessing environmental health and safety risks that could disproportionately affect children by incurring environmental health or safety risks that might arise as a result of the agency's policies, programs, activities, and standards. At the time of the 2010 census, the 26.7 percent of the population of Monterey County under the age of 18 was similar to that of California (25.0 percent) and the nation (24.0 percent; US Census Bureau 2010a).

### 3.9.2 Environmental Consequences

#### 3.9.2.1 Preferred Alternative

Short- and long-term minor beneficial and short-term minor adverse effects are expected from the Preferred Alternative, as detailed in the subsections below.

***EIFS Model Result.*** The economic effects of implementing the Preferred Alternative are estimated using the Economic Impact Forecast System (EIFS) model, a computer-based economic tool that calculates multipliers to estimate the direct and indirect effects of a given action. Changes in spending and employment caused by renovating and constructing on-post lodging facilities are the direct effects of the action. Using the input data and calculated multipliers, the model estimates ROI changes in sales volume, income, employment, and population, accounting for the direct and indirect effects of the action.

For this analysis, a change is considered significant if falls outside the historical range of ROI economic variation. To determine that range, the EIFS model calculates a rational threshold value (RTV) profile for the ROI. That analytical process uses historical data for the ROI and calculates fluctuations in sales volume, income, employment, and population. The historical extremes of these variables for the ROI become the thresholds of significance (i.e., the RTVs) for social and economic change. If the estimated effect of an action falls above the positive RTV or below the negative RTV, the effect is considered significant. Appendix B has a discussion of the method in more detail and shows the model inputs and outputs developed for this analysis.

Short-term minor beneficial economic effects on the regional economy are expected from implementation of the PAL program. The expenditures and employment associated with the renovation and construction of Fort Hunter Liggett lodging would increase ROI sales volume, employment, and income, as determined by the EIFS model (Table 3-5 and Appendix B). These economic effects would be short term, given the temporary nature of the construction process. Such changes in sales volume, employment, and income would fall within historical fluctuations (i.e., within the RTV range) and would be minor.

**Table 3-5  
EIFS Model Output**

<b>Variable</b>	<b>Projected Total Change</b>	<b>Percent Change</b>	<b>RTV Range</b>
Sales (business) volume	\$2,761,204	0.02%	-6.95% to 11.54%
Income	\$423,887	0.01%	-6.89% to 10.52%
Employment	11	0.01%	-3.46% to 3.80%
Population	0	0.00%	-3.30% to 2.64%

Source: EIFS model

**Population and Employment.** Some nonresident employees might temporarily relocate to Monterey County for jobs associated with renovation, construction, and demolition; it is most likely that such employment opportunities would be filled by persons already living in the ROI, so the potential increase in population in the ROI would be considered negligible. Short-term minor beneficial impacts are expected from both the direct and indirect employment opportunities created during the IDP (first 7 years of project implementation).

Operation and maintenance of the proposed hotel would result in a long-term minor beneficial increase in employment. According to the recommendations of the World Tourist Organization, the optimum number of staff per 10 rooms in a three-star hotel would be eight (city-of-hotels.com 2012). Applying this factor to Fort Hunter Liggett, the Preferred Alternative would employ about 43 workers and would be expected to have a long-term minor beneficial effect on employment in the ROI.

Persons choosing to relocate to Monterey County might fill some of the jobs created by the new hotel. Given the population of the county, the project would result in a very small increase in population, the effect of which would be negligible.

**Housing and Lodging.** Under the Preferred Alternative, the total amount of transient lodging at Fort Hunter Liggett would increase by four units. Due to this increase, long-term minor beneficial effects on on-post lodging and short-term minor adverse effects on off-post lodging are expected. Because the hotel would be operated by a private enterprise, it is important for the hotel to be competitive with similar hotels in Monterey County to remain viable. Fort Hunter Liggett would have to provide a level of quality equal to or higher than that of lodging in the regional market sector to accommodate guest expectations.

Under the Preferred Alternative, the developer would construct a new facility to provide a sufficient number of on-post rooms to meet Fort Hunter Liggett's lodging requirements. Once the proposed hotel is operational, demand for on-post lodging that could be met by the new facility would increase, due to the continuing need for lodging for trainees, students, and staff. Demand would also increase because the installation would then be able to provide modern lodging and services, thereby benefiting the quality of life of those who stay at the installation and resulting in beneficial socioeconomic effects.

On-post lodging rates would be competitive with market area hotels. This would result in a decrease in CNAs issued and a decrease in demand for lodging near Fort Hunter Liggett, in greater Monterey County. Despite the increase in lodging on the installation, it is possible Fort Hunter Liggett would not be able to accommodate all the demand for on-post lodging, especially during peak periods when class is in session and training is occurring.

The number of CNAs issued would be reduced considerably after the completion of the proposed 54-room hotel and as a result of recent mission changes. Many travelers currently offered CNAs

would be accommodated on the installation due to the increase in lodging units, the appeal of the newly constructed hotel, and improved accessibility to all installation activities. The Preferred Alternative is expected to result in a small decrease in off-post lodging demand that should lessen over time, resulting in a minor adverse effect.

**Local Economy.** Short- and long-term beneficial effects on the local economy are expected with implementation of the Preferred Alternative. The short-term effects include the expenditures and employment associated with renovating lodging units. Construction of the 54-room hotel would generate additional sales revenue, employee wages, and personal income. The long-term benefits include revenue from the operation of the hotel and associated taxes, such as sales and lodging, and revenue from guests to Fort Hunter Liggett and Monterey County.

**Environmental Justice and Protection of Children.** The Preferred Alternative would not result in disproportionate adverse environmental or health effects on low-income or minority populations. The Preferred Alternative would not substantially affect human health or the environment by excluding persons, denying persons benefits, or subjecting persons to discrimination. In addition, the effects of the Preferred Alternative would be distributed equally among the populations in the ROI.

There is a potential for short-term minor adverse effects on the protection of children under the Preferred Alternative from the presence of construction sites on Fort Hunter Liggett that could be a safety hazard to children. Safety measures in 29 CFR, Part 1926, Safety and Health Regulations for Construction, and Army Regulation 385-10, Army Safety Program, would be followed during construction, minimizing the potential impact on the health and safety of residents, including children. Barriers would be placed around construction sites to deter children from entering. With implementation of these efforts, impacts would be minor adverse.

### **3.9.2.2 No Action Alternative**

Under the No Action Alternative, no temporary or permanent lodging would be constructed, and existing housing units would not be renovated. No direct or indirect impacts on the socioeconomic conditions or lodging would result, and there would be no change in environmental or health effects on low-income or minority populations or children.

## **3.10 TRANSPORTATION**

### **3.10.1 Affected Environment**

Fort Hunter Liggett is in Monterey County in west-central California in a remote area. It is approximately 70 miles southeast of the city of Monterey, 23 miles southwest of King City, and 12 miles west of Lockwood. Because the proposed action would occur in the cantonment area, the ROI for transportation is the cantonment area and regional roads used to access Fort Hunter Liggett.

Transportation to, from, and within Fort Hunter Liggett is mainly by road and street networks. Transportation to and from the lodging facility is by driving and walking (Gannett Fleming 2010). A regional bus system serves commuters to Fort Hunter Liggett; bus route 83 serves Fort Hunter Liggett from Paso Robles and route 82 from Salinas. There is no rail servicing to Fort Hunter Liggett. Regional airports are Mesa Del Rey Airport, Rancho San Simeon Airport, Paso Robles Municipal Airport, and some local airfields. The closest international airport is Mineta San Jose International Airport, followed by San Francisco International Airport.

### 3.10.1.1 Roadways

The major regional travel routes to Fort Hunter Liggett are US Highway 101 (US 101) and Highway 1. Primary access is Jolon Road (County Road G14), connecting with US 101 near King City and again at Bradley, and secondarily by Nacimiento-Fergusson Road, originating at Highway 1 near the town of Lucia (NPS 2007).

Fort Hunter Liggett has approximately 702 miles of maintained roads and tank trails (US Army 2004b). Route Tampa (formerly known as Mission Road), Del Venturi Road, and Infantry Road are important links in the installation's roadway network. Mission Creek Road, Route Tampa/Mission Road, and other unnamed roads connect the cantonment area with more remote portions of Fort Hunter Liggett (NPS 2007; Skinner 2012). With a few exceptions, roads outside the cantonment area have restricted public access and require a permit for entry.

Parcel A is bordered by Infantry Road on the south and Bullard Drive on the west and north. Parcel B is along the south side of Infantry Road, southeast of the road's intersection with Sulfur Springs Road. Parcel C is bordered by Bradley Drive on the east and Route Tampa on the south. Parcel D is along the south side of Infantry Road, south of the intersection with Javelin Court. Parcel E is along the north side of Infantry Road, across the street from the AAFES Fort Hunter Liggett Main Store that is about two hundred feet north/northwest of Parcel B.

### 3.10.1.2 Traffic

Level of service (LOS) is a qualitative measure of operating conditions in a traffic stream and the perception of those conditions by motorists and passengers. Individual LOSs are designated by letters, A for most favorable to F for least favorable, with each representing a range of conditions.

Monterey County considers LOS D or better to be acceptable county roadway and intersection operating conditions (Monterey County 2007). Based on daily volumes and capacities, Mission Road and Infantry Road operated at LOS A in 1991 (NPS 2007). Jolon Road operated at LOS A and B in 1995. According to the 2010 Fort Hunter Liggett Comprehensive Traffic Engineering Study, traffic congestion is not a concern now or projected to 2017 (Gannett Fleming 2010). The average daily traffic counts from the traffic study are shown in Table 3-6. Since that study was completed, modifications to the transportation infrastructure have been made and have altered traffic patterns, such that the study findings may not be consistent with the current traffic volumes. However, that study remains the most current source of information on installation traffic flow.

## 3.10.2 Environmental Consequences

### 3.10.2.1 Preferred Alternative

Short-term minor adverse and long-term minor adverse effects on transportation are expected. Short-term traffic delays from construction vehicles are likely. Construction vehicles would be scheduled and routed to minimize conflicts with other traffic. It is likely that during the construction phases, construction vehicles and day labor traffic would have a short-term minor adverse effect.

As shown in Table 3-7, the additional four rooms in the new hotel would generate 35 additional vehicle trips per day (Institute of Transportation Engineers 2003). The existing transportation system would be able to accommodate the increase in traffic because the road network has ample capacity and congestion is not a concern (Gannett Fleming 2010), and the Preferred Alternative would not disrupt traffic patterns in the long-term, so effects would be long-term minor adverse.

**Table 3-6  
Average Daily Traffic Counts**

<b>Roadway Segment Location</b>	<b>24-Hour Average Daily Traffic Vehicles per Day</b>
Del Venturi Road west of Mission Road	EB 72/WB 70
Mission Creek Road (now known as Route Tampa) north of Bullard Drive	NB 50/SB 49
Sulfur Spring Road east of Infantry Road	EB 122/WB 109
Stuaret Road between Bradley Drive and Infantry Road	NB 162/SB 174
Infantry Road between Bradley Drive and Stuaret Road	NB 756/SB 751
Main Access Control Point	EB 771/WB 699
Bradley Drive between Longbow Street and Stuaret Road	EB 594/WB 574
Blackhawk Road between Longbow Street and Stuaret Road	EB 285/WB 223
Infantry Road between Blackhawk Road and California Road	NB 594/SB 592
7th Division Road between Longbow Street and Infantry Road	EB 299/WB 329
Silo Road (now known as Mission Road) between Main Access Control Point and Nacimiento-Fergusson Road	NB 827/ SB 852
Mission Road (now known as Route Tampa) south of 7th Division Road	NB 393/SB 412
Nacimiento-Fergusson Road west of Silo Road (Silo Road is now known as Mission Road)	NB 68/SB 107
Jolon Road west of Mission Road	EB 692/SB 705
Jolon Road east of Mission Road	EB 119/WB 626

Source: Adapted from Gannett Fleming 2010

Notes:

EB = eastbound

NB = northbound

SB = southbound

WB = westbound

**Table 3-7  
Trip Generation**

<b>Vehicle Trips per day</b>	<b>Change in Trips</b>
New Parcel	470
Parcel A	-435
<i>Installation Wide (net increase)</i>	35

Source: Institute of Transportation Engineers 2003

Because there are no plans for a significant increase in employees, and the guests would likely drive, given the limited bus access to and within Fort Hunter Liggett, the Preferred Alternative would likely have no appreciable effect on public transit, rail, bus, or air traffic in the area. The parking requirement for the new lodging is 83 stalls (Institute of Transportation Engineers 2010). Parking upgrades would be adequate for the new hotel.

### **3.10.2.2 No Action Alternative**

No effects on transportation resources are expected because no change to the road network or traffic volume would occur.

## 3.11 UTILITIES

### 3.11.1 Affected Environment

Utilities at Fort Hunter Liggett and the project sites are potable water, sanitary sewer, stormwater, electricity, natural gas, communications, and solid waste disposal. The following subsections discuss the location, availability, capabilities, and limitations of the utility infrastructure.

**Potable Water Supply.** Wells 236, 382, and 383 supply Fort Hunter Liggett with potable water. Drinking water is provided primarily by wells 382 and 383, with well 236 as a backup. Connected to the system are two potable water storage tanks, with capacities of 1 million gallons and 200,000 gallons. Together, the three wells draw water from two groundwater basins: the Mission-San Antonio Basin and the Jolon-Lockwood Basin. The Mission-San Antonio Basin consists of approximately 6,000 acres of land completely in the installation boundary; it has an estimated 35,000 acre-feet of usable groundwater with a safe yield of 2,500 acre-feet per year. The Jolon-Lockwood Basin consists of approximately 12,000 acres of land to the south and east of Fort Hunter Liggett; it has an estimated 250,000 acre-feet of usable groundwater, with a safe yield of 10,000 acre-feet per year. The Jolon-Lockwood Basin groundwater is primarily used by neighboring municipalities and farms. Fort Hunter Liggett draws less than 500 acre-feet per year from the Jolon-Lockwood Basin (US Army 2004b).

Water from wells 382 and 383 is treated with chlorine and a corrosion inhibitor before it is pumped into the distribution and storage system. Potable water at the installation meets or exceeds federal and state water quality standards (US Army 2004b).

Water mains and laterals run throughout the cantonment area, connecting buildings to the wells and treatment facility.

**Wastewater System.** The cantonment area is served by a gravity sewer system and an oxidation lagoon sewer treatment plant (NPS 2007). The sewer lines range in age and condition. For example, there are vitrified clay lines constructed in the 1930s for the Hacienda and new lines that were installed during the construction of the Spanish Oaks and Milpitas family housing areas.

The oxidation lagoons were constructed in 1972 and are in the southeast portion of the cantonment area between Mission Road and the San Antonio River (NPS 2007). The treatment lagoons have a design capacity of a million gallons per day. As recently as 1995, sewage flows averaged less than 10 percent of the design capacity. Currently, the sewage flow is estimated to be about the same as in 1995, but it could have increased to as high as 15 percent of the design capacity (Grindstaff 2012). Sewer infiltration and storm drain connections significantly increase during the wet season.

Secondary treatment effluent is disinfected and pumped from the oxidation ponds to a spray irrigation site approximately two-thirds of a mile east of the sewer treatment plant (NPS 2007). The irrigation site is fenced.

**Stormwater System.** Stormwater at the cantonment area of Fort Hunter Liggett is directed toward the San Antonio River through a series of channels, most of which are grassy, but some are concrete. Fort Hunter Liggett has implemented an SWPPP that primarily addresses industrial activities and requires separate permits and individual stormwater pollution prevention plans for larger construction projects.

**Electricity.** Electricity at the installation is provided by the Pacific Gas and Electric Company and is distributed through overhead lines.

**Natural Gas.** Propane gas is trucked into the installation to refill the 68 aboveground storage tanks (AST) that are installed across the developed portion of the installation. The ASTs range in size from 250 to 9,200 gallons and are connected to buildings throughout the cantonment area through buried pipeline. There are no tanks on the project sites, but there is an AST at Building 116 and at the AAFES station on Infantry Road, both of which are next to Parcel B.

**Communications.** Fort Hunter Liggett lodging areas are served by commercial telephone, cable, Internet, cellular telephone, and television providers. Telephone and data line service is provided by a commercial telecommunications company through an underground cable extending from the installation's main gate off Jolon Road. The communication cables run to the Directorate of Information Management building. The cantonment area has a system of underground telephone and data cables that connect buildings to the main service line.

**Solid Waste.** Solid waste is defined as any garbage or refuse; sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility; and other discarded material, including solid, liquid, semisolid, or contained gaseous material from industrial, commercial, mining, and agricultural operations and from community activities. Construction and demolition (C&D) debris includes uncontaminated solid waste from constructing, remodeling, repairing, and demolishing utilities, structures, and roads, as well as uncontaminated solid waste from land clearing.

Solid waste disposal in southern Monterey County is supplied by the Salinas Valley Solid Waste Authority. A private waste contractor collects the waste at Fort Hunter Liggett and hauls it to the Jolon Transfer Station in King City before it is ultimately disposed of at the Johnson Canyon Sanitary Landfill (Grindstaff 2012). The Johnson Canyon Sanitary Landfill has a daily maximum permitted throughput of 1,574 tons per day and has a remaining capacity of 6,923,297 cubic yards (SWIS 2012).

### 3.11.2 Environmental Consequences

#### 3.11.2.1 Preferred Alternative

The project would create debris during the construction, demolition, and renovation of the lodging facility. This debris would be transported off-site and properly disposed of in local or regional landfills. Implementing the Preferred Alternative would generate approximately 2,070 tons of C&D debris (Table 3-8). Approximately half of the debris would be recycled, leaving 1,035 tons of C&D debris for disposal in landfills. Some of the debris could include asbestos-containing materials, lead-based paint, or small amounts of polychlorinated biphenyls found in older fluorescent light ballasts. These materials would require special handling and disposal. Long-term minor adverse effects on utilities are expected due to the generation of C&D debris; however, debris would be properly handled and disposed of, and regional landfill capacity would be sufficient to accommodate the debris.

The Preferred Alternative would increase the number of hotel rooms at Fort Hunter Liggett by four; because the new hotel would have energy-efficient and low-usage utility systems, appliances, and fixtures, the overall utility demand would be similar to or slightly increased compared to current demand. New utility infrastructure would be required to connect the new lodging facility to the existing utility systems (i.e., potable water, wastewater, stormwater, energy, natural gas, and communications). The increased demand for utilities would be minor,

**Table 3-8  
Construction and Demolition Debris under the Preferred Alternative**

<b>Action</b>	<b>Debris Generation (Pounds/Square Foot)</b>	<b>Debris from Proposed Action (Pounds)</b>	<b>Debris from Proposed Action (Tons)</b>	<b>Quantity recycled— 50 Percent (Tons)</b>	<b>Total Quantity Disposed in Landfill (Tons)</b>
Construction	4.4	130,680	65.3	32.7	32.7
Demolition	115	2,350,830	1,175.4	587.7	587.7
<b>Total</b>		2,481,510	1,240.8	620.4	620.4

and the capacity of the existing utility infrastructure would be adequate to handle current and future projected demand from the hotel. Because of this, there would be minor adverse effects on utility infrastructure systems.

### 3.11.2.2 No Action Alternative

No effects on utilities are expected. No changes to utility systems would result, and no C&D debris would be generated if the No Action Alternative were implemented. Current and future utilities would remain as described in Section 3.11.1.

## 3.12 HAZARDOUS AND TOXIC SUBSTANCES

### 3.12.1 Affected Environment

The use, storage, transport, and disposal of hazardous and toxic substances are regulated at the federal, state, and local levels. For this analysis, the terms hazardous waste, hazardous materials, and toxic substances include those substances defined as hazardous by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), and the Toxic Substances Control Act (TSCA). In general, they include substances that, because of their quantity, concentration, or physical, chemical, or toxic characteristics, could present substantial danger to public health or welfare or the environment when released.

Fort Hunter Liggett manages hazardous and toxic substances in accordance with relevant regulations, Army Regulation 200-1: Environmental Protection and Enhancement, and installation-specific policies and management plans. These include a pollution prevention plan, hazardous waste minimization and management plans, installation action plan (that addresses remediation sites and military munitions response sites), and spill prevention and response plans (USAR 2010).

To identify areas on or near the project sites where hazardous substances or petroleum products or their derivatives could have been stored, released, or disposed of, an environmental condition of property (ECP) report was prepared (USACE 2012). The ECP covers hazardous and toxic substances, as defined in CERCLA, RCRA, and TSCA, as well as other materials that could affect human health and safety and the environment, such as munitions and explosives of concern (MEC). The relevant findings of the ECP are summarized below. No other concerns regarding the use, storage, transport, or disposal of hazardous and toxic substances have been identified at the project sites.

**Remediation Sites.** Multiple Installation Restoration Program remediation sites and Solid Waste Management Units (SWMU) have been identified at Fort Hunter Liggett. The Combat Development Experimentation Command motor park, SWMUs 66 and 72, overlaps Parcel B. The area was reportedly used for vehicle maintenance between the 1940s and 1960s; however, the

area appears undisturbed in aerial photographs from 1956 and 1967. An AST or underground storage tank (UST) containing waste oil was reportedly 10 feet southeast of the power line adjacent to a 1-inch diameter pipe that protruded from the ground and may have been removed in the 1960s. The location of the tank could not be confirmed by a review of aerial photographs or a site walk in April 1997. A surface soil sample collected near a pipe that protruded from the ground contained no detectable volatile organic compounds (VOC) but did contain the semi-VOC bis(2-ethylhexyl)phthalate at a concentration of 0.43 milligrams per kilogram (mg/kg), which is below the EPA Regional Screening Level for residential soil of 35 mg/kg. In 2002, several pipes in the western portion of the former motor park associated with water supply well #222 were traced and showed no sign of being associated with USTs or ASTs. Fort Hunter Liggett has recommended no further action at these SWMUs (Fort Hunter Liggett 2003; Harding Lawson Associates 1997; Environmental Data Resources, Inc. 2012a; EPA 2012b).

A release from former USTs occurred near Building 194 that is approximately 0.14 mile northeast of Parcel E. The area around Building 194 has been designated as an Installation Restoration Program site and as SWMUs 14, 16, and 64. The primary chemicals of concern affecting soil and groundwater at the site are benzene, methyl tertiary butyl ether, 1,2-dichloroethane, and lead. The groundwater flow direction at the release area is to the south, toward Parcel E; however, contaminated groundwater does not extend to Parcel E. Quarterly groundwater monitoring is ongoing (Ahtna Engineering 2012; Harding Lawson Associates 1997).

***Munitions and Explosives of Concern.*** Twelve Military Munitions Response Program sites have been identified at Fort Hunter Liggett. Investigation is ongoing at seven sites, and the response is complete at the remaining five (USARC 2010). The project parcels are part of Military Munitions Response Program Munitions Response Site FTHE-001-R-01 that encompasses 1,016 acres and includes the majority of the cantonment area (URS 2010). MEC used at this former artillery range includes large caliber artillery, small arms rounds, grenades, and rockets (FPM Group, Ltd. 2008). The project parcels are in a 469-acre portion of the Munitions Response Site that has been investigated and where it was determined that no further action is necessary (URS 2010). Because the project is on a military installation, there is the possibility that unidentified MEC may be present on the project parcels.

***Pesticides.*** Documentation is unavailable for historical pesticide use from the time when certain pesticides of concern (such as chlordane, dieldrin, and heptachlor) were used. It is likely that some of these pesticides were used at Parcel A, considering the age of Building 128 and that pesticides of this type were commonly used at that time.<sup>5</sup> According to Public Works Technical Bulletin 200-1-31, legally applied chlordane does not require remediation under CERCLA or RCRA and can be managed in place, which is consistent with the pesticide application exception described in 42 United States Code (USC) 9607(i) (USACE 2004). No evidence that chlordane or other pesticides were spilled or illegally applied at the project sites was found during this investigation.

***Lead-Based Paint and Asbestos-Containing Materials.*** A 1991 ACM survey report for Building 128 indicates that friable asbestos was present in water heater and pipe fitting insulation, and nonfriable asbestos was present in joint compound, caulking, floor tile, floor tile mastic, and baseboard mastic (Diagnostic Engineering, Inc. 1991). The authors of the report recommended removal of the friable asbestos; however, no abatement records were provided for review and these materials may still be in the building. Because Building 128 was constructed in 1970, it is

---

<sup>5</sup> Pesticides may also be present in soil on Parcels D and E due to the age of Buildings 196 and 168B. The land at these parcels is not included in this analysis.

possible that the building contains lead-based paint (LBP). During a visual site inspection (VSI) in spring 2012, green peeling paint was observed on the wood siding of the second-floor balcony on the exterior of the building. The green paint was in poor condition on all sides of the building, and paint chips were observed on soil in the building drip line at both ends of the building. Army policy calls for controlling LBP by using in-place management (as opposed to mandated removal procedures). Maintenance staff are given instructions for routine cleaning procedures to capture LBP fragments from suspected locations.

Because Buildings 196 and 168B were constructed before 1978, it is possible that these buildings contain LBP and ACM.

**Mold.** Mold can be present almost anywhere in indoor and outdoor environments. Mold typically grows on common building components (e.g., walls, ventilation systems, support beams) that are chronically moist or water damaged. Elevated fungal exposure in humans can result in flu-like symptoms, including runny nose, eye irritation, cough, congestion, and asthma aggravation. Inhalation of fungal spores, fragments, or metabolites (e.g., mycotoxins, volatile organic compounds) from a variety of fungi can lead to or exacerbate allergic reactions or cause toxic effects or cause infections. No mold issues have been reported at buildings on the project sites, and no mold was observed in these buildings during the VSI.

**Storage Tanks.** An AST or UST containing waste oil may have been on Parcel B from the 1940s to the 1960s associated with the former Combat Development Experimentation Command motor park. Investigations have not found indications of the tank or an associated release, and Fort Hunter Liggett has recommended no further investigation. No other ASTs or USTs containing hazardous materials or petroleum products are known or expected to exist on the project sites themselves; a fuel station next to Parcel B contains two USTs that were installed in 1998. They contain gasoline and have a total capacity of 30,000 gallons. No leaks or spills have occurred at the fuel station (Moeller 2012b; Zavala 2012). ASTs storing propane are next to Parcels B, D, and E. During the VSI, no evidence of leaks or spills was observed, and the ASTs appeared to be in good condition.

**Oil/Water Separators.** An oil/water separator is on Parcel B and is associated with the car wash facility (Moeller 2012b).

**Polychlorinated Biphenyls.** All transformers containing polychlorinated biphenyls (PCBs) have been removed from Fort Hunter Liggett (Moeller 2012b; USARC 2010). Older fluorescent light ballasts in buildings on the project sites may contain small amounts of PCBs, but there is no evidence that PCB-containing materials have leaked or spilled on the project sites.

**Radon.** Radon is a naturally occurring, colorless, and odorless radioactive gas produced by the decay of naturally occurring radioactive material (e.g., potassium, uranium). Atmospheric radon is diluted to insignificant levels; however, when radon is concentrated in enclosed areas, it can present human health risks. The EPA Radon Zone for Monterey County is Zone 2; this indicates that the county is predicted to have average indoor radon levels greater than 2 but less than 4 picocuries per liter (Environmental Data Resources, Inc. 2012b). No radon surveys of the project sites have been conducted.

## 3.12.2 Environmental Consequences

### 3.12.2.1 Preferred Alternative

Construction, demolition, and renovation would generate construction debris. These activities would require that petroleum, oil, lubricants, paint, asphalt, and other potentially hazardous materials be transported to, temporarily stored on, and used at the project sites. Due to the age of Buildings 128, 196, and 168B, they are presumed to contain LBP, ACM, and PCBs (in older light ballasts). Demolition of Building 128 would disturb building components and would generate waste containing these hazardous and toxic substances; Buildings 196 and 168B would not be disturbed.

Rest Easy would be responsible for the proper handling, storage, use, transport, disposal, and cleanup of hazardous and toxic materials and waste and solid waste generated from the project. To ensure the proper management of these materials and to protect people and the environment from hazards associated with these materials, Rest Easy would develop and implement a hazardous materials management plan, a hazardous waste management plan, and a site-specific health and safety plan. The plans would adhere to federal, state, and municipal laws, ordinances, and regulations and would detail relevant BMPs. The plans would specify response actions if unexpected contamination or MEC were encountered on the project sites. Construction debris would be characterized for ACM, LBP, PCBs, and would be disposed of in accordance with applicable federal, state, and local regulations or relevant materials would be handled and disposed of as if they contained ACM, LBP, or PCBs.

With these measures, adverse impacts would be minor and limited to the duration of construction and demolition. Eliminating the potential for hazardous materials to create health hazards or be released to the environment would be a long-term minor beneficial effect, from removing materials containing ACM, LBP, and PCBs.

### 3.12.2.2 No Action Alternative

There would be no adverse effects from hazardous and toxic substances because Fort Hunter Liggett would continue to abate potential hazards, such as LBP, ACM, and PCBs in accordance with applicable laws.

## 3.13 CUMULATIVE EFFECTS

### 3.13.1 Cumulative Projects

The cumulative projects identified in this section are those in the recent past (within the last 2 years) and those that are expected to be undertaken during the 7-year IDP.

The past and present military construction actions at Fort Hunter Liggett include:

- Garrison Commanders Quarters (completed)
- Replacement Family Housing for four Junior Noncommissioned Officers (completed)
- Light Demolition Range (completed)
- Solar Cantonment #1 (completed)
- Equipment Concentration Site (ECS) Warehouse (to be completed in 2012)
- Grenade Launcher Range (to be completed in 2012)
- Hand Grenade Familiarization Range (to be completed in 2012)

- Tactical Vehicle Wash Rack (to be completed in February 2013)
- ECS Tactical Equipment Maintenance Facility (to be completed in May 2013)

The future military construction actions at Fort Hunter Liggett include:

- Automated Multipurpose Machine Gun Range (to be completed in 2013)
- Solar Cantonment #2 (to be completed in March 2013)
- Unaccompanied Personnel Housing Barracks (to be completed in 2014)
- Fire Support Facility (Schoonover) (to be completed in 2014)
- Training Exercise Warehouse (to be completed in 2013)
- Operational Readiness Training Complex (to be completed in 2015)
- Central Hazardous Waste Facility
- Emergency Services Center (to be completed in 2016)
- ECS Vehicle Storage Yard

For long-term projects, the Fort Hunter Liggett Capital Investment Strategy identifies development capacities and projected developments in the three development areas of the installation—Hacienda Heights, Blackhawk Hills, and Mission Valley. Parcels A, B, and C are in the Hacienda Heights area. The Hacienda Heights ADP has a new development capacity of 12,000 square feet (sf) to 24,000 sf Mission/Industrial, 228,000 sf to 465,000 sf Campus/Administration, and 169 units of housing. The Blackhawk Hills ADP has a new development capacity of 51,728 sf Mission/Industrial and 1,691,900 sf to 2,189,100 sf Campus/Administration. The Mission Valley ADP has a new development capacity of 392,902 sf to 454,402 sf Mission/Industrial and 189,900 sf to 335,600 sf Campus/Administration.

### 3.13.2 Cumulative Effects Summary

**Land Use.** Cumulative effects on land use from the current and future operation of Fort Hunter Liggett are guided by the RPMP and the supporting Installation Development Plan and ADP documents described in Section 3.1.1. The RPMP has a strategic vision for the future development of the facility that includes the redevelopment of housing in the Hacienda Heights and Blackhawk Hills planning and design districts. Development of the Preferred Alternative and the redevelopment of housing throughout the installation have been analyzed and accounted for in these documents. All future development would be done in accordance with these plans. The Preferred Alternative would be developed in an area of the installation consistent with the planning goals of the RPMP, in that it would complement the pedestrian-friendly small-town atmosphere envisioned in the RPMP and its supporting documents. Land uses that complement housing, such as parks, open space, retail, and community services, would be next to the new hotel. The Preferred Alternative would not conflict with existing or future land uses in the Hacienda Heights district. Therefore, cumulative land use impacts from development of the Preferred Alternative would be minor adverse.

**Aesthetics.** Construction and operation of the Preferred Alternative, when combined with other past, present, and reasonably foreseeable projects, would result in minor adverse effects on aesthetic resources due to the existing developed landscape in and around the ROI. Existing development on and adjacent to Parcels B and C has transformed the landscape to a developed viewshed, primarily in the north, east, and southeast directions from the ROI. Due to this altered

landscape, unobstructed viewsheds are not present from the ROI, and there are already sources of light and glare in the night sky. Any alteration to the landscape from the Preferred Alternative would be consistent with the developed landscape of the ROI and surrounding installation. Therefore, the Preferred Alternative's contribution to cumulative impacts on the aesthetic environment would be minor adverse.

**Air Quality.** Because the project would not exceed the General Conformity Rule thresholds for criteria pollutants or the CEQ threshold for GHG emissions, the Preferred Alternative's contribution to cumulative impacts on air quality would result in minor adverse impacts.

**Noise.** Noise attenuates with distance and attenuates substantially when it meets such obstacles as buildings or other structures, so the ROI for cumulative noise impacts is limited to the project sites and adjacent properties. No proposed projects in the ROI would have substantial long-term noise impacts. Other construction projects in the ROI would have noise impacts similar to those described for the Preferred Alternative. Because construction would generally be limited to daytime weekday hours and the noise would cease when construction was complete, cumulative noise impacts would be minor adverse.

**Geology and Soils.** Long-term minor adverse cumulative impacts are expected. Cumulative physical geographic impacts would be minor because changes to topography would be localized to individual development sites and would not alter the physiographic environment of the general area. The project ROI is in one of the most active seismic areas of California and is subject to strong ground shaking in the event of a large earthquake. Seismicity impacts could be adverse, but cumulative development projects would be constructed to current building code standards to mitigate the risk.

The cumulative soil resource effects of the proposed development and other developments in the ROI would likely increase the disturbance of soil and the overall volume of soil in stormwater runoff. These effects would be mitigated by preparing SWPPPs and using appropriate construction practices to minimize runoff. Depending on the types of soil, the cumulative projects may increase the potential for soil erosion and slope instability. Project developers would be responsible for doing soils investigations and other activities to reduce the potential impacts on soil erosion and slope instability.

**Water Resources.** In addition to the Preferred Alternative, other construction or development projects on or near Fort Hunter Liggett could impact water resources during construction or operation by altering drainage patterns or adversely impacting surface waters. This would result in minor adverse cumulative impacts.

**Biological Resources.** Similar to the Preferred Alternative, cumulative projects could remove existing vegetation or displace wildlife during construction. Vegetation and wildlife in the ROI are generally common species adapted to urban environments. Although special status species may occur, there is little suitable habitat for them in the ROI. The Preferred Alternative and cumulative projects would have minor adverse effects on biological resources due to the highly disturbed habitat in and around the ROI.

**Cultural Resources.** New construction and development projects in Fort Hunter Liggett could have adverse effects on cultural resources if appropriate measures to identify and avoid archaeological resources below the surface and preserve architectural resources are not followed. Project developers in the region of the project sites should research cultural and historic resources in their areas and site their projects to avoid known archaeological and architectural resources. This would minimize the incremental impacts from each project and minimize the cumulative impacts on cultural resources in the region to minor adverse. The Preferred Alternative would

result in minor adverse effects on cultural resources and would make a minor contribution to cumulative minor adverse effects to cultural resources in the Fort Hunter Liggett area.

**Socioeconomics.** Other construction or development projects in the Fort Hunter Liggett region could result in socioeconomic benefits and impacts. The magnitude of effects from the Preferred Alternative would not be sufficient to substantially contribute to the cumulative socioeconomic effects on the region.

The Preferred Alternative would have minor adverse effects on socioeconomic resources. The analysis identified minor beneficial and negligible adverse impacts on population, short- and long-term minor beneficial effects on employment, minor adverse impacts on the lodging sector surrounding Fort Hunter Liggett, and minor short- and long-term beneficial impacts on the economy of Monterey County. The Preferred Alternative would not contribute to cumulative effects on environmental justice populations; therefore, the proposed action would have a very minor contribution to cumulative socioeconomic impacts in the ROI.

**Transportation.** Minor long-term, adverse, cumulative effects are expected from the Preferred Alternative in conjunction with other development projects in the vicinity that would add to traffic and increase demands on the transportation system. The magnitude of effects from implementing the Preferred Alternative would not be sufficient to substantially contribute to cumulative transportation effects.

**Utilities.** Minor long-term cumulative effects on utilities are expected. In addition to construction of the lodging facility under the Preferred Alternative, other industrial, commercial, and residential development projects in the region could increase the demand on utilities. Because the area around Fort Hunter Liggett is mostly undeveloped, a substantial increase in demand is unlikely, so cumulative impacts would be minor.

**Hazardous and Toxic Substances.** In addition to the Preferred Alternative, redevelopment and rehabilitation of older structures in the area could remove hazardous materials, such as ACM, LBP, and PCBs. This could cause short-term disturbance of these materials and could eliminate the long-term possibility that they could pose a hazard to people or the environment, resulting in short-term minor adverse and long-term minor beneficial cumulative effects on hazardous and toxic substances.

### 3.14 MITIGATION SUMMARY

Mitigation measures would be implemented as part of the Preferred Alternative to ensure that adverse effects are minor or avoided. These measures are included in the impact analyses of several resource sections and in Table 3-9. The ground lease would include provisions to hold Rest Easy accountable for implementation of these measures. The lease would require Rest Easy to prepare an Environmental Management Plan that would be approved by the installation. Implementation of the Preferred Alternative would comply with all applicable laws, ordinances, and regulations.

**Table 3-9  
Mitigation Measures**

---

***Aesthetics and Visual Resources***

- Rest Easy would design, construct, and maintain the new hotel in accordance with the structures, facilities, and landscaping guidelines in the Army Installation Design Standards and the Fort Hunter Liggett IDG.
- 

***Air Quality***

- Rest Easy would implement construction BMPs to minimize fugitive dust, such as applying water or
-

**Table 3-9**  
**Mitigation Measures**

---

other materials to dirt roads, material stockpiles, and other surfaces.

---

**Noise**

- Rest Easy would limit construction activities to normal weekday business hours to the extent practicable, and would muffle or shroud construction equipment if necessary.
- 

**Geology and Soils**

- Rest Easy would employ BMPs to control runoff, erosion, and sedimentation.
- 

**Water Resources**

- Rest Easy would obtain coverage under the General Permit for Discharges from Construction Activities and would prepare and implement an SWPPP.
  - Rest Easy would comply with the post-construction stormwater management requirements mandated by Section 438 of EISA.
- 

**Biological Resources**

- Where vegetation could be disturbed by demolition and construction, Rest Easy would do surveys for nesting migratory birds before vegetation disturbance. Fort Hunter Liggett would evaluate the survey results and coordinate with Rest Easy to ensure construction activities would not have any adverse effects on migratory birds. Fort Hunter Liggett would closely monitor construction and development from March 1 to August 31 to avoid adverse effects on breeding migratory birds.
  - If any oak trees are impacted or removed, Rest Easy would replace them at a 3:1 ratio with the same species as seedlings or saplings that are at least 2 feet tall.
- 

**Cultural Resources**

- A provision would be included in the ground lease regarding "Accidental or Inadvertent Discoveries of Historic Properties." The lease provision would be based on Section 4.5.3 of the ICRMP.
  - Rest Easy would follow the design guidelines in the Fort Hunter Liggett IDG and the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.
  - The Army and Rest Easy would conduct a formal evaluation of Gibb Hall to determine its eligibility for listing in the NRHP prior to demolition of the building. If Gibb Hall is determined eligible, effects resulting from the Preferred Alternative would be addressed through Section 106 consultation with the SHPO.
  - At Parcel C, the Army would consult with the SHPO to address impacts to the Mission San Antonio de Padua viewshed; mitigation measures, such as the use of buffer planting, would be proposed as necessary to minimize adverse effects.
  - At Parcel C, Rest Easy would follow guidance in the IDG to create a buffer between the hotel and the Mission San Antonio de Padua, such as the use of buffer planting to screen the hotel from the Mission.
- 

**Socioeconomics and Environmental Justice**

- Rest Easy would place barriers around construction sites to prevent children from entering the site.
- 

**Transportation**

- Rest Easy would schedule and route construction vehicles to minimize conflicts with other traffic.
- 

**Hazardous and Toxic Substances**

- Rest Easy would be responsible for the proper handling, storage, use, transport, characterization, disposal, and cleanup of hazardous and toxic materials and waste and solid waste generated from the project.
  - Rest Easy would develop and implement a hazardous materials management plan, a hazardous waste management plan, and a site-specific health and safety plan. The plans would adhere to federal, state, and municipal laws, ordinances, and regulations and would detail relevant BMPs. The plans would specify response actions if unexpected contamination or MEC were encountered on the project sites.
-

## **SECTION 4.0 CONCLUSIONS**

This EA was prepared to evaluate the potential effects on the natural and human environment from the proposal to implement the PAL program at Fort Hunter Liggett. The EA examines the proposed action (Preferred Alternative) and a No Action Alternative. The No Action Alternative is prescribed by CEQ regulations to be the baseline against which the proposed action and alternatives are analyzed.

This EA evaluates potential long- and short-term effects on land use, visual and aesthetic resources, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomics (including environmental justice and protection of children), transportation, utilities, and hazardous and toxic substances.

Implementing the proposed action would be expected to result in a combination of short- and long-term minor adverse and beneficial effects. Short-term minor adverse effects on land use, aesthetics and visual resources, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomics, transportation, utilities, and hazardous and toxic substances would be expected, primarily associated with renovation, construction, and demolition activities. These activities would change land use of the project sites, modify the visual environment, increase fugitive dust and pollutant emissions, cause a temporary increase in noise, disturb soils, contribute to possible stormwater-related erosion, disturb vegetation and wildlife, disturb potentially unidentified archaeological resources, increase potential exposure of children to hazards, generate construction vehicle trips, produce construction and demolition debris, and disturb hazardous building materials.

Long-term minor adverse effects would be expected on land use, aesthetics and visual resources, air quality, noise, water resources, biological resources, cultural resources, transportation, and utilities. The new hotel would result in changed land use, a new element in the visual environment, an increase in stormwater runoff from additional impervious surfaces, displaced or disturbed vegetation, and a minor addition to the viewshed of the historic Mission San Antonio de Padua. The increase in lodging units and operation of the hotel would increase pollutant emissions, ambient noise levels, vehicle trips, and demand for utilities.

Beneficial effects on the local economy would be expected from expenditures and employment associated with lodging renovation, construction, and operation. Beneficial effects for hazardous and toxic substances would be expected from removing or replacing hazardous building materials, thus removing potential public exposure pathways.

Implementing the proposed action would have no long-term effect on geology and soils.

Implementing the No Action Alternative would not alter existing conditions and there would be no environmental or socioeconomic effects.

For each resource, the predicted effects from the proposed action, identified as the Army's Preferred Alternative, and the No Action Alternative are summarized in Table 4-1.

**Table 4-1**  
**Summary of Potential Environmental and Socioeconomic Consequences**  
**Environmental and Socioeconomic Effects**

<b>Resource</b>	<b>Proposed Action (Preferred Alternative)</b>	<b>No Action Alternative</b>
Land use	Minor adverse	No effect
Aesthetics and visual resources	Minor adverse	No effect
Air quality	Minor adverse	No effect
Noise	Minor adverse	No effect
Geology and Soils	Short-term minor adverse, long-term no effect	No effect
Water resources	Minor adverse	No effect
Biological resources	Minor adverse	No effect
Cultural resources	Minor adverse	No effect
Socioeconomics	Short-term minor adverse, short- and long-term minor beneficial	No effect
Transportation	Minor adverse	No effect
Utilities	Minor adverse	No effect
Hazardous and toxic substances	Short-term minor adverse, long-term minor beneficial	No effect

Implementing the proposed action would not be expected to result in significant environmental or socioeconomic effects. Therefore, issuance of a FNSI would be appropriate, and an environmental impact statement need not be prepared before implementing the proposed action.

## SECTION 5.0

### REFERENCES AND PERSONS CONSULTED

- Ahtna Engineering. 2012. *2011 Fourth Quarter Groundwater Monitoring Report, Building 194 Area and Building 258 Area, Fort Hunter Liggett, California*. Prepared for the Department of the Army, US Army Corps of Engineers, Sacramento District. February 15, 2012.
- \_\_\_\_\_. 2010. *Final 2010 Second Semiannual Report, Landfill Postclosure Monitoring, Fort Hunter Liggett, California*. Prepared for the Department of the Army, US Army Corps of Engineers, Sacramento District. November 4, 2010.
- Bio Systems Analysis, Inc. 1992. Archeological Site Record for CA-MNT-100H, Mission San Antonio de Padua. Bio Systems Analysis, Inc. Supplement to *National Register of Historic Places Nomination form for Mission San Antonio de Padua*, Prepared by Brother Timothy Arththur, OFM, Director of Franciscan Friars, 1975.
- California Air Resources Board. 2012. Mandatory Greenhouse Gas Emissions Reporting. From Internet Web site: <http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-rep.htm>. Accessed on September 26, 2012.
- CDC (California Department of Conservation). 2011. *California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program Map for Monterey County*. August, 2011.
- CDFG (California Department of Fish and Game). 2012. California Natural Diversity Database. California Department of Fish & Game Biogeographic Data Branch. Rarefind 4. 2012.
- Central Coast Regional Water Quality Control Board. 2011. *Water Quality Control Plan for the Central Coast Basin*. Regional Water Quality Control Board, Central Coast Region; State Water Resources Control Board; California Environmental Protection Agency. June 2011.
- Central Coast Salmon Enhancement, Inc. 2008. *Nacitone Watersheds Management Plan Watershed Resources Analysis Summary Report*. February 2008.
- CEQ (Council on Environmental Quality). 2010. *Memorandum for Heads of Federal Departments and Agencies on Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions*. February 18, 2010. Council on Environmental Quality, Washington, DC.
- Cipolla, Lisa. 2012. US Army Garrison Fort Hunter Liggett. Personal communications with Julia Mates, Tetra Tech. May 11, June 27, and August 27, 2012.
- City-of-hotels.com. 2012. From Internet Web site: <http://www.city-of-hotels.com/165/hotel-staff-en.html>. Accessed on April 30, 2012.
- Diagnostic Engineering, Inc. 1991. *Asbestos Survey Report, Fort Hunter Liggett, Building P128*. June 1991.

- DoD (US Department of Defense). 2010. *Greenhouse Gas Targets Announcement for DoD*. Internet website: <http://www.defense.gov/releases/release.aspx?releaseid=13276>. January 2010.
- EDR (Environmental Database Resources, Inc.). 2012a. *EDR Aerial Photo Decade Package: Fort Hunter Liggett, California*. Inquiry Number: 3272604.5. March 08, 2012.
- \_\_\_\_\_. 2012b. *Environmental Data Resources, Inc. Radius Map™ Report with Geocheck®: Fort Hunter Liggett, California*. Inquiry Number: 3272604.2s. March 06, 2012.
- EPA (US Environmental Protection Agency). 1971. *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*. December 1971.
- \_\_\_\_\_. 1974. *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. Prepared by: USEPA Office of Noise Abatement and Control. March 1974.
- \_\_\_\_\_. 2012a. *Climate Change - Health and Environmental Effects*. Internet website: <http://www.epa.gov/climatechange/>. Accessed on June 12, 2010.
- \_\_\_\_\_. 2012b. Region 9 Regional Screening Level Table, Residential Soil. Internet website: <http://www.epa.gov/region9/superfund/prg/>. May 2012.
- FEMA (Federal Emergency Management Agency). 2009. National Flood Insurance Rate Map, Monterey County, California. Effective Date, April 2, 2009.
- Fort Hunter Liggett. 2003. Excerpt from *Preliminary Assessment/Site Inspection, Solid Waste Management Units and Areas of Concern, Fort Hunter Liggett, California*. Provided by Mike Moeller, Compliance Branch Manager, Directorate of Public Works, Environmental Division, Fort Hunter Liggett, California, via email. August 2003.
- \_\_\_\_\_. 2012a. *Fort Hunter Liggett Installation Development Plan*. Prepared by The Urban Collective, LLC. Prepared for Directorate of Public Works, Fort Hunter Liggett, CA, under contract to Headquarters, US Army Corps of Engineers. June 11, 2012.
- \_\_\_\_\_. 2012b. *Fort Hunter Liggett Installation Design Guide*. Prepared by The Urban Collective, LLC. Prepared for Directorate of Public Works, Fort Hunter Liggett, CA, under contract to Headquarters, US Army Corps of Engineers. May 11, 2012.
- FPM Group, Ltd. 2008. *Final Site Inspection Report Fort Hunter Liggett, Monterey County, California, Military Munitions Response Program*. September 2008.
- Gannet Fleming. 2010. *Comprehensive Traffic Engineering Study*. Prepared for the Military Surface Deployment and Distribution Command. Fort Hunter Liggett.
- Grindstaff, Mark. 2012. Operations and Maintenance Manager, US Army Fort Hunter Liggett. Personal communication with Landin Johnson, Tetra Tech. July 3, 2012.
- Harding Lawson Associates. 1997. Update of RCRA Facility Assessment, SWMU Status, and Recommendations for Inclusion in the RCRA Facility Investigation. Letter report. March 1997.

- Intergovernmental Panel on Climate Change. 2007. *Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, United Kingdom.
- Institute of Transportation Engineers. 2003. *Transportation Engineers Trip Generation Manual*. 7th Edition. Institute of Transportation Engineers, Washington, DC.
- \_\_\_\_\_. 2010. *Parking Generation, 4th Edition*.
- Jones Lang Lasalle. Undated. Due Diligence Report (DDR), Fort Hunter Liggett.
- MBUAPCD (Monterey Bay Unified Air Pollution Control District). 2009a. *Attainment Status*. Internet website: <http://www.mbuapcd.org/feedback/air-quality-planning>. January 2009. Accessed on April 25, 2012.
- \_\_\_\_\_. 2009b. *Exceedances and Design Values for State Standards, North Central Coast Air Basin Air Monitoring Stations, 2006-2008*. Internet website: <http://www.mbuapcd.org/feedback/air-quality-planning>. September 2009. Accessed on April 25, 2012.
- \_\_\_\_\_. 2012. *List of Current Rules*. Internet website: <http://www.arb.ca.gov/drdb/mbu/cur.htm>. Accessed on June 12, 2012.
- McNeill, Charles L. 1976. *National Register of Historic Places Nomination form for Milpitas Ranch House/Hacienda*. Prepared by Charles L. McNeill, Director, Facilities Engineering. HQ 7<sup>th</sup> Infantry Division, Fort Ord.
- Moeller, Mike. 2012a. Compliance Branch Manager, Directorate of Public Works Environmental Division, Fort Hunter Liggett, CA. Personal communication with Tetra Tech. September 10, 2012.
- \_\_\_\_\_. 2012b. Compliance Branch Manager, Directorate of Public Works Environmental Division, Fort Hunter Liggett, CA. Personal communication with Mark Duffy, Tetra Tech. March 29, 2012.
- Monterey County. 2007. County of Monterey General Plan Draft 2007. Internet Web site: <http://www.co.monterey.ca.us/planning/gpu/draftNov2007/default.htm>. Accessed on May 25, 2012.
- NPS (National Park Service). 2004. Draft Fort Hunter Liggett Special Resource Study & Environmental Assessment. June 2004. Internet Web site: [http://www.nps.gov/pwro/fhl/fhl\\_draftreport.htm](http://www.nps.gov/pwro/fhl/fhl_draftreport.htm). Accessed on July 03, 2012.
- \_\_\_\_\_. 2007. Final Fort Hunter Liggett Special Resource Study & Environmental Assessment. January 2007. Internet Web site: <http://www.nps.gov/pwro/fhl/>. Accessed on May 25, 2012.
- State of California, Department of Finance. 2007. Race/Ethnic Population with Age and Sex Detail, 2000–2050. July 2007. From Internet Web site: <http://www.dof.ca.gov/research/demographic/data/race-ethnic/2000-50/>. Accessed on April 25, 2012.

- SWIS (Solid Waste Information System). 2012. Internet Web site:  
<http://www.calrecycle.ca.gov/SWFacilities/Directory/>. Accessed on May 25, 2012.
- URS. 2010. Figure 1-2, Munitions Response Site Boundary and Surrounding Safety Fans (FTHE-001-R-01). July 2010.
- US Army. 2004a. Army Installation Design Standards. May 2004.
- \_\_\_\_\_. 2004b. US Army Reserve Training Center Fort Hunter Liggett, California. Integrated Natural Resources Management Plan, FY2004-2008. August 2004.
- \_\_\_\_\_. 2011. Preliminary Final Integrated Natural Resources Management/Environmental Assessment. US Army Combat Support Training Center, Fort Hunter Liggett. 2011.
- \_\_\_\_\_. 2012. ASIP Unit List Report, Units in Base, Fort Hunter Liggett, SMAS as of January 3, 2012.
- USACE (US Army Corps of Engineers). 2004. *Guidance for Addressing Chlordane Contamination at Department of Defense Sites. Public Works Technical Bulletin 200-1-31*. September 30.
- \_\_\_\_\_. 2006. Environmental Assessment for the Implementation of the BRAC Recommendation to Relocate the 91<sup>st</sup> Division (TSD) to Fort Hunter Liggett, California. Prepared for W. Scott Wood, Colonel, US Army, Commanding Combat Support Training Center.
- \_\_\_\_\_. 2012. *Environmental Condition of Property Report for PAL at Fort Hunter Liggett, California*. July 2012.
- USARC (United States Army Reserve Command). 2003. *Integrated Cultural Resources Management Plan, Fort Hunter Liggett. Edited by Parsons, Inc.* USARC Environmental Quality Division. 2003.
- \_\_\_\_\_. 2004. Biological Assessment of the Effects of Activities Conducted at Fort Hunter Liggett, Monterey County, California, on Federal Endangered and Threatened Species. 2004.
- \_\_\_\_\_. 2010. *Final Environmental Assessment Addressing Installation Development and Training at Fort Hunter Liggett, California*. May 2010.
- US Bureau of Economic Analysis. 2010. CA25 Total full-time and part-time employment by SIC industry. April 22, 2010. From Internet Web site:  
<http://www.bea.gov/iTable/iTable.cfm?ReqID=70&step=1&isuri=1&acrdrn=5>. Accessed on April 25, 2012.
- \_\_\_\_\_. 2011a. CA1-3 Personal income summary. From Internet Web site:  
<http://www.bea.gov/iTable/iTable.cfm?ReqID=70&step=1&isuri=1&acrdrn=5>. Accessed on April 26, 2012.
- \_\_\_\_\_. 2011b. CA25N Total full-time and part-time employment by NAICS industry. April 21, 2011. From Internet Web site:  
<http://www.bea.gov/iTable/iTable.cfm?ReqID=70&step=1&isuri=1&acrdrn=5>. Accessed on April 25, 2012.

- US Bureau of Labor Statistics. 2012. Local Area Unemployment Statistics, Not Seasonally Adjusted. Data series: LAUST06000003, LAUST06000004, LAUST06000005, LAUST06000006. April 21, 2011. From Internet Web site: <http://data.bls.gov/cgi-bin/dsrv>. Accessed on April 15, 2012.
- US Census Bureau. 2000. Census 2000 Summary File 1, Matrices P1, P3, P4, P8, P9, P12, P13, P,17, P18, P19, P20, P23, P27, P28, P33, PCT5, PCT8, PCT11, PCT15, H1, H3, H4, H5, H11, and H12. From Internet Web site: <http://factfinder2.census.gov>. Accessed on April 15 and 25, 2012.
- \_\_\_\_\_. 2009. Table 1-C. Projections of the Population and Components of Change for the United States: 2010 to 2050 Constant Net International Migration Series (NP2009-T1-C). Population Division. December 16, 2009. From Internet Web site: <http://www.census.gov/population/www/projections/2009cnmsSumTabs.html>. Accessed on April 24, 2012.
- \_\_\_\_\_. 2010a. DP-1, Profile of General Population and Housing Characteristics: 2010, 2010 Demographic Profile Data. From Internet Web site: <http://factfinder2.census.gov>. Accessed on April 15, 2012.
- \_\_\_\_\_. 2010b. QT-H1, Profile of General Housing Characteristics: 2010, 2010 Census Summary File 1. From Internet Web site: <http://factfinder2.census.gov>. Accessed on April 15, 2012.
- \_\_\_\_\_. 2011. Table 1: 2010 Poverty and Median Income Estimates - Counties. Small Area Estimates Branch. November 2011. From Internet Web site: <http://www.census.gov/did/www/saipe/data/statecounty/data/2010.html>. Accessed on April 28, 2012.
- World Soundscape Project. 1999. *Handbook for Acoustic Ecology*. Second edition. Barry Truax, ed. Simon Fraser University. Cambridge Street Publishing. Internet Web site: [http://www.sfu.ca/sonic-studio/handbook/Sound\\_Propagation.html](http://www.sfu.ca/sonic-studio/handbook/Sound_Propagation.html). 1999.
- Zahniser J. and L. Roberts. 1980. Cultural Resources Reconnaissance and Overview, Fort Hunter Liggett, California. Prepared under the Direction of Department of the Army Sacramento District Corps of Engineers, Sacramento, California. Contract DACA05-78-C-0160. Prepared by Environmental Research Archaeologists.
- Zavala, Alma. 2012. Environmental Protection Specialist, Directorate of Public Works Environmental Division, Fort Hunter Liggett, CA. Personal communication with Mark Duffy, Tetra Tech. March 29, 2012.

---

## **SECTION 6.0**

### **LIST OF PREPARERS**

Emmy Andrews  
MS, Environmental Management, University of San Francisco  
BA, Art and Art History, Duke University  
Years of Experience: 9

John Bock  
BS, Environmental Toxicology, University of California, Davis  
Years of Experience: 19

Mark Duffy  
BS, Geology, State University of New York at Cortland  
Years of Experience: 7

Derek Farmer  
MS, Urban Planning, San Jose State University  
BA, Communication Design, California State University, Chico  
Years of Experience: 15

Landin Johnson  
BA, Political Science and Economics, University of Hawaii at Manoa  
Years of Experience: 8

Genevieve Kaiser  
MS, Energy Management and Policy, University of Pennsylvania  
BA, Economics, College of William and Mary  
Years of Experience: 22

Tim Lavalley, LPES, Inc.  
MS, Environmental Health, Tufts University  
BS, Mechanical Engineering, Northeastern University  
Years of Experience: 15

Shannon Lindquist  
MS, Environmental Studies, The Evergreen State College  
BS, Ecology and Evolutionary Biology, Sonoma State University  
Years of Experience: 6

Matt Loscalzo  
MS, Environmental Studies, University of Colorado - Boulder  
BS, Political Science, Binghamton University  
Years of Experience: 8

Julia Mates  
MA, History/Public History California State University, Sacramento  
BA, History, University of California, Los Angeles  
Years of Experience: 11

Kristin Shields  
BA, Environmental Science, Sweet Briar College  
Years of Experience: 19

## **SECTION 7.0 DISTRIBUTION LIST**

Congressman Sam Farr  
100 West Alisal Street, Rm 127  
Salinas, CA 93901

U.S. Environmental Protection Agency  
Attn: David Farrell, Mail Code E-3  
75 Hawthorne Street  
San Francisco, CA 94105-3901

Carol Roland-Nawi  
California State Historic Preservation  
Officer  
Office of Historic Preservation  
P.O. Box 942896  
Sacramento, CA, 94296-0001

Roger Root  
Assistant Field Supervisor  
U.S. Fish and Wildlife Service  
2493 Portola Road, Suite B  
Ventura, CA 93003

Patricia Port  
Office of Environmental Policy and  
Compliance  
Department of the Interior  
Jackson Center One  
1111 Jackson Street, Suite 520  
Oakland, CA 94607

California Department of Fish and Game  
Central Region 4  
Attn: Terry Palmisano  
1234 East Shaw Avenue  
Fresno, CA 93710

Peggy Hernandez  
Forest Supervisor  
Los Padres National Forest  
USDA Los Padres National Forest  
6755 Hollister Avenue Suite 150  
Goleta, CA 93117

Richard Stedman  
Air Pollution Control Officer  
Monterey Bay Unified Air Pollution Control  
District  
24580 Silver Cloud Court  
Monterey, CA 93940  
Monterey County Water Resources Agency  
893 Blanco Circle  
Salinas, CA 93901

Governor's Office of Planning and Research  
California State Clearinghouse  
P.O. Box 3044  
Sacramento, CA 95812-3044

Regional Water Quality Control Board  
Central Coast Region 3  
896 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401

Pinnacles National Monument (NPS)  
Park Headquarters  
5000 Hwy 146  
Paicines, CA 95043

San Antonio School Library  
PO Box 5000  
Lockwood, CA 93932

Fort Hunter Liggett Library  
Attn: AFRC-FMH-PAD  
Building 191, Fort Hunter Liggett  
Jolon, CA 93928

Monterey County Free Library  
Buena Vista Branch  
18250 Tara Drive  
Salinas, CA 93908

Monterey County Free Library  
King City Branch  
402 Broadway  
King City, CA 93930

---

---

**APPENDIX A**  
**RECORD OF NON-APPLICABILITY**

**RECORD OF NON-APPLICABILITY**

In Accordance with the Clean Air Act - General Conformity Rule For  
The Proposed Privatization of Army Lodging, Fort Hunter Liggett, California

The Army proposes to privatize the ownership and operations of its lodging at Fort Hunter Liggett, California. The Army would convey specified lodging facilities to Rest Easy, LLC. The Army would also grant leases of the land underlying the existing facilities, as well as other land for construction of new lodging facility. Rest Easy would be expected to meet Fort Hunter Liggett's lodging requirements through operation and maintenance of the existing facilities, as well as by renovating inadequate facilities and constructing new ones. As a result of the action, the lodging inventory at Fort Hunter Liggett would increase from 50 units to 54 units. The action would generate new direct and indirect emissions from the construction and operation of the additional facilities.

General Conformity under the Clean Air Act, Section 176 has been evaluated according to the requirements of Title 40 of the Code of Federal Regulations Part 93, Subpart B. The requirements of this rule are applicable to the action because:

The highest total annual direct and indirect emissions from this Preferred Alternative or any of the alternatives have been estimated at 4.9 tons of NO<sub>x</sub>, and 0.8 tons VOC, which would be below the applicability threshold value of 100 tons.

Supported documentation and emission estimates:

- Are attached
- Appear in the National Environmental Policy Act documentation
- Other (not necessary)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

**Table A-1 Construction Equipment Use**

Equipment Type	Number of Units	Days on Site	Hours Per Day	Operating Hours
Excavators Composite	1	115	4	460
Rollers Composite	1	173	8	1,384
Rubber Tired Dozers Composite	1	115	8	920
Plate Compactors Composite	1	115	4	460
Trenchers Composite	1	58	8	464
Air Compressors	1	115	4	460
Cement & Mortar Mixers	1	115	6	690
Cranes	1	115	7	805
Generator Sets	1	115	4	460
Tractors/Loaders/Backhoes	1	230	7	1,610
Pavers Composite	1	58	8	464
Paving Equipment	2	58	8	928

**Table A-2 Construction Equipment Emission Factors (lbs/hour)**

Equipment	CO	NO <sub>x</sub>	VOC	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>
Excavators Composite	0.5828	1.3249	0.1695	0.0013	0.0727	0.0727	119.6
Rollers Composite	0.4341	0.8607	0.1328	0.0008	0.0601	0.0601	67.1
Rubber Tired Dozers Composite	1.5961	3.2672	0.3644	0.0025	0.1409	0.1409	239.1
Plate Compactors Composite	0.0263	0.0328	0.0052	0.0001	0.0021	0.0021	4.3
Trenchers Composite	0.5080	0.8237	0.1851	0.0007	0.0688	0.0688	58.7
Air Compressors	0.3782	0.7980	0.1232	0.0007	0.0563	0.0563	63.6
Cement and Mortar Mixers	0.0447	0.0658	0.0113	0.0001	0.0044	0.0044	7.2
Cranes	0.6011	1.6100	0.1778	0.0014	0.0715	0.0715	128.7
Generator Sets	0.3461	0.6980	0.1075	0.0007	0.0430	0.0430	61.0
Tractors/Loaders/Backhoes	0.4063	0.7746	0.1204	0.0008	0.0599	0.0599	66.8
Pavers Composite	0.5874	1.0796	0.1963	0.0009	0.0769	0.0769	77.9
Paving Equipment	0.0532	0.1061	0.0166	0.0002	0.0063	0.0063	12.6

Source: CARB 2011

**Table A-3 Construction Equipment Emissions (Tons per Year)**

Equipment	CO	NO <sub>x</sub>	VOC	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>
Excavators Composite	0.1341	0.3047	0.0390	0.0003	0.0167	0.0167	27.5037
Rollers Composite	0.3004	0.5956	0.0919	0.0005	0.0416	0.0416	46.4006
Rubber Tired Dozers Composite	0.7342	1.5029	0.1676	0.0011	0.0648	0.0648	109.9886
Plate Compactors Composite	0.0061	0.0076	0.0012	0.0000	0.0005	0.0005	0.9922
Trenchers Composite	0.1179	0.1911	0.0429	0.0002	0.0160	0.0160	13.6233
Air Compressors	0.0870	0.1835	0.0283	0.0002	0.0130	0.0130	14.6297
Cement and Mortar Mixers	0.0154	0.0227	0.0039	0.0000	0.0015	0.0015	2.5006
Cranes	0.2419	0.6480	0.0716	0.0006	0.0288	0.0288	51.7885
Generator Sets	0.0796	0.1605	0.0247	0.0002	0.0099	0.0099	14.0283
Tractors/Loaders/Backhoes	0.3271	0.6235	0.0969	0.0006	0.0482	0.0482	53.7791
Pavers Composite	0.1363	0.2505	0.0455	0.0002	0.0178	0.0178	18.0811
Paving Equipment	0.0247	0.0492	0.0077	0.0001	0.0029	0.0029	5.8593
<b>Total</b>	<b>2.20</b>	<b>4.54</b>	<b>0.62</b>	<b>0.0040</b>	<b>0.26</b>	<b>0.26</b>	<b>359.18</b>

**Table A-4 Painting**

VOC Content	0.84	lbs/gallon	
Coverage	400	sqft/gallon	
Emission Factor	0.0021	lbs/sqft	
Building/Facility	Wall Surface	VOC [lbs]	VOC [tpy]
All Buildings Combined		59,400	124.7
<b>Total</b>		<b>86,900</b>	<b>182.5</b>

Source: SCAQMD 1993

**Table A-5 Delivery of Equipment and Supplies**

Number of Deliveries	2						
Number of Trips	2						
Miles Per Trip	30						
Days of Construction	230						
Total Miles	27,600						
Pollutant	CO	NO <sub>x</sub>	VOC	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>
Emission Factor (lbs/mile)	0.0219	0.0237	0.0030	0.0000	0.0009	0.0007	2.7
Total Emissions (lbs)	605.8	654.5	82.6	0.7	23.6	20.4	75,056.4
Total Emissions (tpy)	0.30	0.33	0.04	0.0004	0.01	0.01	37.53

Source: CARB 2011

**Table A-6 Surface Disturbance**

TSP Emissions	2.18	lb/acre				
PM <sub>10</sub> /TSP	0.45					
PM <sub>2.5</sub> /PM <sub>10</sub>	0.15					
Period of Disturbance	30	days				
Capture Fraction	0.5					
Building/Facility	Area [acres]	TSP[lbs]	PM <sub>10</sub> [lbs]	PM <sub>10</sub> [tons]	PM <sub>2.5</sub> [lbs]	PM <sub>2.5</sub> [tons]
All Facilities	1.1	53	24	0.01	2	0.00
Total	1.1	53	24	0.01	2	0.00

Sources: EPA 1995, 2005

**Table A-7 Worker Commutes**

Number of Workers	30						
Number of Trips	2						
Miles Per Trip	30						
Days of Construction	58						
Total Miles	104,400.00						
Pollutant	CO	NO <sub>x</sub>	VOC	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>
Emission Factor (lbs/mile)	0.0105	0.0011	0.0011	0.0000	0.0001	0.0001	1.1
Total Emissions (lbs)	1,101.3	115.1	112.7	1.1	8.9	5.5	114,791.2
Total Emissions (tpy)	0.55	0.06	0.06	<0.01	<0.01	<0.01	57.40

Source: CARB 2011

**Table A-8 Total Construction Emissions (Tons per Year)**

Activity/Source	CO	NO <sub>x</sub>	VOC	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>
Construction Equipment	2.20	4.54	0.62	0.0040	0.26	0.26	359.18
Painting	0.00	0.00	0.06	0.0000	0.00	0.00	0.00
Delivery of Equipment and Supplies	0.30	0.33	0.04	0.0004	0.01	0.01	37.53
Surface Disturbance	0.00	0.00	0.00	0.0000	0.01	0.00	0.00
Worker Commutes	0.55	0.06	0.06	0.0006	0.00	0.00	57.40
Total Construction Emissions	3.06	4.92	0.78	0.00	0.29	0.28	454.10

**Table A-9 Boiler Emissions**

Gross Area	15,950	sf				
Heating Requirements	99,000	btu/sf				
Total Annual Heat Required	1579	MMBTU				
Heating Value	150	MMBtu/1000 Gallons				
Total #2 Oil Used	10.5	10 <sup>3</sup> Gallons				
Pollutant	CO	NO <sub>x</sub>	VOC	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Emission Factor (lb/1000 gal)	5	24	2.493	0.1	2	2
Total Emissions (tons)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

1. Emission factors for all pollutants were obtained from U.S. EPA's AP-42, Section 1.3. Conservatively assume that PM<sub>10</sub> = PM.

2. Assumed sulfur concentration 1%

3. Heating requirements obtained from Commercial Buildings Energy Consumption Survey, DOE 2003

**Table A-10 Worker Commutes**

<b>Number of Workers</b>	35					
<b>Number of Trips</b>	2					
<b>Miles Per Trip</b>	30					
<b>Days of Work</b>	260					
<b>Total Miles</b>	546,000					
<b>Pollutant</b>	<b>CO</b>	<b>NO<sub>x</sub></b>	<b>VOC</b>	<b>SO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>Emission Factor (lbs/mile)</b>	0.0105	0.0011	0.0011	0.0000	0.0001	0.0001
<b>Total Emissions (lbs)</b>	5759.45	602.17	589.24	5.87	46.44	28.90
<b>Total Emissions (tons)</b>	<b>2.88</b>	<b>0.30</b>	<b>0.29</b>	<b>0.00</b>	<b>0.02</b>	<b>0.01</b>

CARB (California Air Resources Board). 2011. *EMFAC Emission Rates Database*.

[http://www.arb.ca.gov/jpub/webapp//EMFAC2011WebApp/rateSelectionPage\\_1.jsp](http://www.arb.ca.gov/jpub/webapp//EMFAC2011WebApp/rateSelectionPage_1.jsp). Accessed April 2012.

DOE (US Department of Energy). 2003. *Consumption and Gross Energy Intensity by Census Region for Sum of Major Fuels, Commercial Buildings Energy Consumption Survey*. U.S. Department of Energy, Washington, DC.

EPA (US Environmental Protection Agency). 1995. *Compilation of Air Pollutant Emission Factors, AP-42, 5th edition, Vol. I: Stationary Point and Area Sources*

\_\_\_\_\_. 2005. Methodology to Estimate the Transportable Fraction (TF) of Fugitive Dust Emissions for Regional and Urban Scale Air Quality Analyses.

SCAQMD (South Coast Air Quality Management District). 1993. *CEQA Air Quality Handbook*. South Coast Air Quality Management District, Diamond Bar, CA.

---

---

**APPENDIX B**  
**ECONOMIC IMPACT FORECAST SYSTEM**

# ***ECONOMIC IMPACT FORECAST SYSTEM (EIFS) MODEL***

## ***SOCIOECONOMIC IMPACT ASSESSMENT***

Socioeconomic impacts are linked through cause-and-effect relationships. Military payrolls and local procurement contribute to the economic base for the region of influence (ROI). In this regard, renovation, demolition, and construction of lodging on Fort Hunter Liggett would have a multiplier effect on the local and regional economy. With the proposed action, direct jobs would be created (e.g., construction jobs), generating new income and increasing personal spending. This spending generally creates secondary jobs, increases business volume, and increases revenues for schools and other social services.

## ***THE ECONOMIC IMPACT FORECAST SYSTEM***

The US Army, with the assistance of many academic and professional economists and regional scientists, developed EIFS to address the economic impacts of NEPA-requiring actions and to measure their significance. As a result of its designed applicability, and in the interest of uniformity, EIFS should be used in NEPA assessments. The entire system is designed for the scrutiny of a populace affected by the actions being studied. The algorithms in EIFS are simple and easy to understand, but still have firm, defensible bases in regional economic theory.

EIFS was developed under a joint project of the U.S. Army Corps of Engineers, the U.S. Army Environmental Policy Institute, and the Computer and Information Science Department of Clark Atlanta University. EIFS is implemented as an on-line system supported by the US Army Corps of Engineers, Mobile District. The system is available to anyone with an approved user-id and password. US Army Corps of Engineers staff is available to assist with the use of EIFS.

The databases in EIFS are national in scope and cover the approximately 3,700 counties, parishes, and independent cities that are recognized as reporting units by federal agencies. EIFS allows the user to define an economic ROI by identifying the counties, parishes, or cities to be analyzed. Once the ROI is defined, the system aggregates the data, calculates multipliers and other variables used in the various models in EIFS, and prompts the user for forecast input data.

## ***THE EIFS MODEL***

The basis of the EIFS analytical capabilities is the calculation of multipliers that are used to estimate the impacts resulting from Army-related changes in local expenditures or employment. In calculating the multipliers, EIFS uses the economic base model approach, which relies on the ratio of total economic activity to basic economic activity. Basic, in this context, is defined as the production or employment engaged to supply goods and services outside the ROI or by federal activities (such as military installations and their employees). According to economic base theory, the ratio of total income to basic income is measurable (as the multiplier) and sufficiently stable so that future changes in economic activity can be forecast. This technique is especially appropriate for estimating aggregate impacts and makes the economic base model ideal for the EA and EIS process.

The multiplier is interpreted as the total impact on the economy of the region resulting from a unit change in its base sector; for example, a dollar increase in local expenditures due to an expansion of its military installation. EIFS estimates its multipliers using a location quotient approach based on the concentration of industries within the region relative to the industrial concentrations for the nation.

The user inputs into the model the data elements which describe the Army action: the change in expenditures, or dollar volume of the construction project(s); change in civilian or military employment; average annual income of affected civilian or military employees; the percent of

civilians expected to relocate due to the Army’s action; and the percent of military living on-post. Once these are entered into the EIFS model, a projection of changes in the local economy is provided. These are projected changes in sales volume, income, employment, and population. These four indicator variables are used to measure and evaluate socioeconomic impacts. Sales volume is the direct and indirect change in local business activity and sales (total retail and wholesale trade sales, total selected service receipts, and value-added by manufacturing). Employment is the total change in local employment due to the proposed action, including not only the direct and secondary changes in local employment, but also those personnel who are initially affected by the military action. Income is the total change in local wages and salaries due to the proposed action, which includes the sum of the direct and indirect wages and salaries, plus the income of the civilian and military personnel affected by the proposed action. Population is the increase or decrease in the local population as a result of the proposed action.

The PAL program at Fort Hunter Liggett would require renovation of existing lodging and construction of new lodging. The current working estimate for the cost of renovation and construction of these facilities (about \$10,080,000) was divided over the projected 7-year initial development period and entered as the change in expenditures (about \$1,440,000 per year).

**THE SIGNIFICANCE OF SOCIOECONOMIC IMPACTS**

Once model projections are obtained, the Rational Threshold Value (RTV) profile allows the user to evaluate the significance of the impacts. This analytical tool reviews the historical trends for the defined region and develops measures of local historical fluctuations in sales volume, income, employment, and population. These evaluations identify the positive and negative changes within which a project can affect the local economy without creating a significant impact. The greatest historical changes define the boundaries that provide a basis for comparing an action’s impact on the historical fluctuation in a particular area. Specifically, EIFS sets the boundaries by multiplying the maximum historical deviation of the following variables:

		Increase	Decrease
Sales Volume	X	100%	75%
Income	X	100%	67%
Employment	X	100%	67%
Population	X	100%	50%

These boundaries determine the amount of change that will affect an area. The percentage allowances are arbitrary, but sensible. The maximum positive historical fluctuation is allowed with expansion because economic growth is beneficial. While cases of damaging economic growth have been cited, and although the zero-growth concept is being accepted by many local planning groups, military base reductions and closures generally are more injurious to local economics than are expansion.

The major strengths of the RTV are its specificity to the region under analysis and its basis on actual historical data for the region. The EIFS impact model, in combination with the RTV, has proven successful in addressing perceived socioeconomic impacts. The EIFS model and the RTV technique for measuring the intensity of impacts have been reviewed by economic experts and have been deemed theoretically sound.

The following are the EIFS input and output data for the proposed action and the RTV values for the ROI.

**EIFS REPORT****PROJECT NAME**

Fort Hunter Liggett PAL

**STUDY AREA**

Monterey County, CA

**FORECAST INPUT**

Change In Local Expenditures	\$1,440,000
Change In Civilian Employment	0
Average Income of Affected Civilian	\$0
Percent Expected to Relocate	0
Change In Military Employment	0
Average Income of Affected Military	\$0
Percent of Military Living On-post	0

**FORECAST OUTPUT**

Employment Multiplier	2.73	
Income Multiplier	2.73	
Sales Volume – Direct	\$1,440,000	
Sales Volume – Induced	\$2,491,200	
Sales Volume – Total	\$3,931,200	0.03%
Income – Direct	\$221,062	
Income - Induced	\$382,437	
Income – Total (place of work)	\$603,499	0.01%
Employment – Direct	6	
Employment – Induced	10	
Employment – Total	16	0.01%
Local Population	0	
Local Off-base Population	0	0%

**RTV SUMMARY**

	Sales Volume	Income	Employment	Population
Positive RTV	11.54%	10.52%	3.80%	2.64%
Negative RTV	-6.95%	-6.89%	-3.46%	-3.30%

## RTV DETAILED

### SALES VOLUME

SALES VOLUME					
Year	Value	Adj_Value	Change	Deviation	%Deviation
1969	782488	3419472	0	0	0
1970	833654	3442991	23519	-73211	-2.13
1971	937255	3711530	268539	171809	4.63
1972	993787	3806204	94674	-2056	-0.05
1973	1121251	4047716	241512	144782	3.58
1974	1223671	3976931	-70785	-167515	-4.21
1975	1347087	4014319	37389	-59341	-1.48
1976	1435240	4047377	33057	-63673	-1.57
1977	1598051	4218855	171478	74748	1.77
1978	1800168	4428413	209559	112829	2.55
1979	1961735	4335434	-92979	-189709	-4.38
1980	2090811	4056173	-279261	-375991	-9.27
1981	2300386	4048679	-7494	-104224	-2.57
1982	2465870	4093344	44665	-52065	-1.27
1983	2658135	4279597	186253	89523	2.09
1984	3012472	4639207	359609	262879	5.67
1985	3333017	4966195	326989	230259	4.64
1986	3558606	5195565	229370	132640	2.55
1987	3859831	5982738	787173	690443	11.54
1988	4098072	5573378	-409360	-506090	-9.08
1989	4295370	5541027	-32351	-129081	-2.33
1990	4666822	5740191	199164	102434	1.78
1991	4828296	5697389	-42802	-139532	-2.45
1992	5134009	5852770	155381	58651	1
1993	4960907	5506607	-346163	-442893	-8.04
1994	4858923	5247637	-258970	-355700	-6.78
1995	5037467	5289340	41703	-55027	-1.04
1996	5310360	5416567	127227	30497	0.56
1997	5600047	5600047	183480	86750	1.55
1998	6029051	5908470	308423	211693	3.58
1999	6540748	6279118	370648	273918	4.36
2000	7005188	6514825	235707	138977	2.13

## INCOME

INCOME					
Year	Value	Adj_Value	Change	Deviation	%Deviation
1969	1131324	4943886	0	0	0
1970	1209659	4995892	52006	-141368	-2.83
1971	1359729	5384527	388635	195261	3.63
1972	1474356	5646783	262256	68882	1.22
1973	1665273	6011635	364852	171478	2.85
1974	1877185	6100851	89216	-104158	-1.71
1975	2005550	5976539	-124312	-317686	-5.32
1976	2131215	6010026	33487	-159887	-2.66
1977	2367254	6249551	239525	46151	0.74
1978	2749323	6763335	513784	320410	4.74
1979	3005994	6643247	-120088	-313462	-4.72
1980	3380115	6557423	-85824	-279198	-4.26
1981	3896377	6857623	300200	106826	1.56
1982	4110024	6822640	-34984	-228358	-3.35
1983	4591513	7392336	569696	376322	5.09
1984	5010763	7716575	324239	130865	1.7
1985	5333240	7946528	229953	36579	0.46
1986	5736176	8374817	428290	234916	2.81
1987	6178011	9575917	1201100	1007726	10.52
1988	6513141	8857872	-718045	-911419	-10.29
1989	6825967	8805497	-52375	-245749	-2.79
1990	7406878	9110460	304963	111589	1.22
1991	7524742	8879195	-231265	-424639	-4.78
1992	8233907	9386654	507459	314085	3.35
1993	8279921	9190712	-195941	-389315	-4.24
1994	8347392	9015184	-175529	-368903	-4.09
1995	8827591	9268970	253786	60412	0.65
1996	9035855	9216572	-52398	-245772	-2.67
1997	9633244	9633244	416672	223298	2.32
1998	10441502	10232672	599428	406054	3.97
1999	11127427	10682330	449658	256284	2.4
2000	11969747	11131865	449535	256161	2.3

## EMPLOYMENT

EMPLOYMENT				
Year	Value	Change	Deviation	%Deviation
1969	134779	0	0	0
1970	134641	-138	-2918	-2.17
1971	140398	5757	2977	2.12
1972	136768	-3630	-6410	-4.69
1973	144675	7907	5127	3.54
1974	147367	2692	-88	-0.06
1975	150858	3491	711	0.47
1976	148311	-2547	-5327	-3.59
1977	154221	5910	3130	2.03
1978	158561	4340	1560	0.98
1979	162130	3569	789	0.49
1980	160475	-1655	-4435	-2.76
1981	161689	1214	-1566	-0.97
1982	161801	112	-2668	-1.65
1983	165183	3382	602	0.36
1984	170668	5485	2705	1.58
1985	176201	5533	2753	1.56
1986	177628	1427	-1353	-0.76
1987	184224	6596	3816	2.07
1988	192559	8335	5555	2.88
1989	197037	4478	1698	0.86
1990	202384	5347	2567	1.27
1991	203481	1097	-1683	-0.83
1992	198515	-4966	-7746	-3.9
1993	193992	-4523	-7303	-3.76
1994	187101	-6891	-9671	-5.17
1995	190538	3437	657	0.34
1996	198403	7865	5085	2.56
1997	200600	2197	-583	-0.29
1998	211408	10808	8028	3.8
1999	221474	10066	7286	3.29
2000	223754	2280	-500	-0.22

## POPULATION

POPULATION				
Year	Value	Change	Deviation	%Deviation
1969	255128	0	0	0
1970	248235	-6893	-11517	-4.64
1971	252730	4495	-129	-0.05
1972	254140	1410	-3214	-1.26
1973	255261	1121	-3503	-1.37
1974	263534	8273	3649	1.38
1975	270976	7442	2818	1.04
1976	275942	4966	342	0.12
1977	281545	5603	979	0.35
1978	284129	2584	-2040	-0.72
1979	286882	2753	-1871	-0.65
1980	292406	5524	900	0.31
1981	299677	7271	2647	0.88
1982	306241	6564	1940	0.63
1983	313698	7457	2833	0.9
1984	321458	7760	3136	0.98
1985	328102	6644	2020	0.62
1986	335849	7747	3123	0.93
1987	341268	5419	795	0.23
1988	345947	4679	55	0.02
1989	349872	3925	-699	-0.2
1990	357535	7663	3039	0.85
1991	364805	7270	2646	0.73
1992	371860	7055	2431	0.65
1993	371002	-858	-5482	-1.48
1994	352363	-18639	-23263	-6.6
1995	355486	3123	-1501	-0.42
1996	362215	6729	2105	0.58
1997	376794	14579	9955	2.64
1998	387889	11095	6471	1.67
1999	396267	8378	3754	0.95
2000	403092	6825	2201	0.55

\*\*\*\*\* End of Report \*\*\*\*\*

## **ACRONYMS AND ABBREVIATIONS**

AAFES	Army and Air Force Exchange Services
ACM	asbestos-containing material
ADP	area development plan
AST	aboveground storage tank
BAT	best available technology
BCT	best conventional technology
BMP	best management practice
C&D	construction and demolition
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CNA	Certificate of Non-Availability
CNPS	California Native Plant Society
CO <sub>2</sub>	carbon dioxide
dba	A-weighted decibel
DNL	day-night average sound level
EA	environmental assessment
ECP	environmental condition of property
ECS	Equipment Concentration Site
EIFS	Economic Impact Forecast System
EISA	Energy Independence and Security Act
EO	executive order
EPA	US Environmental Protection Agency
FNSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FTE	full-time equivalent
FY	fiscal year
GHG	greenhouse gas
ICRMP	Integrated Cultural Resources Management Plan
IDG	Installation Design Guide
IDP	initial development period
IHG	InterContinental Hotels Group
LBP	lead-based paint
LDMP	Lodging Development Management Plan
LOS	level of service
LTH	long-term hold
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MEC	munitions and explosives of concern
MHPI	Military Housing Privatization Initiative

NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
PAL	Privatization of Army Lodging
PCB	polychlorinated biphenyl
PM <sub>10</sub>	inhalable particulate matter
PX	post exchange
RCRA	Resource Conservation and Recovery Act
Rest Easy	Rest Easy, LLC
ROI	region of influence
RPMP	Real Property Master Plan
RTV	rational threshold value
sf	square feet
STH	short-term hold
SWMU	Solid Waste Management Unit
SWPPP	stormwater pollution prevention plan
TSCA	Toxic Substances Control Act
UST	underground storage tank
VOC	volatile organic compound
VSI	visual site inspection