



View from Mission Creek Road, NPS photo

EA **2**

Affected Environment

Affected Environment

This environmental assessment analyzes the potential effects of each alternative proposed in the Draft Fort Hunter Liggett Special Resource Study. This “Affected Environment” chapter describes the baseline environmental conditions at Fort Hunter Liggett which may be affected by the alternatives. Alternatives address the transfer of historic and non-historic structures and their immediately surrounding grounds. Because actions in the alternatives are not expected to affect natural resources, this chapter does not describe natural resources (see “Environmental Consequences” chapter for further analysis, and “Resource Description” chapter for a detailed description of natural resources).

Portions of the following section were adapted from the *Final Environmental Assessment for the Disposal and Reuse of the BRAC Property at Fort Hunter Liggett*, September 2000, U.S. Army Corps of Engineers.

Cultural Resources

For purposes of this analysis, archeological resources and historic structures have been assessed by geographic location. The northern cantonment area includes the vicinity surrounding the Hacienda complex and the ranch bungalows, and the Jolon area includes the vicinity surrounding the Tidball Store land and the Gil Adobe. There do not appear to be cultural resources associated with the Javelin Court housing area. A detailed account of the study area’s historical context can be found in the “Resource Description” chapter of the *Special Resource Study*.

NORTH CANTONMENT AREA

Archeological Resources. Four archeological surveys have been conducted in the northern cantonment area and four archeological sites have been identified (see Table 2 in the “Resource Description” chapter). These sites include CA-MNT-891H, a multi-component site with prehistoric datable materials; CA-MNT-1566H, the San Antonio Mission Water System; CA-MNT-1569H, the Sanchez Adobe (Ditch Tender’s

Adobe); and portions of CA-MNT-1563H, the Camino Real / Caretta Trail. In addition, there are other archeological sites associated with the Mission San Antonio de Padua area, which is an inholding within Fort Hunter Liggett. Some of these sites have been documented, while other sites are continuing to be uncovered and studied. Also located in the vicinity of this area is a portion of the Juan Bautista de Anza National Historic Trail. None of these sites are located within the BRAC excess property. The landscape elements of the Milpitas Ranch House (Milpitas Hacienda) property were assigned a site number, CA-MNT-940H, by the State of California. The Milpitas Hacienda is described in more detail in the Historic Structures section below (US Army Corps of Engineers 2000b).

Historic Structures. Table 1 in the “Resource Description” chapter provides a complete list of buildings constructed prior to 1945 located on or near the BRAC property. Seven of these structures are within the northern cantonment area, the most prominent of which is the Milpitas Hacienda (Building 101). The Milpitas Hacienda is the only nationally significant, National Register of Historic Places (NRHP)-listed building within this area. The Milpitas Hacienda was listed on the NRHP in 1977. Its condition is described in the “Resource Description” and “Significance” chapters of this draft study report.

Of the other pre-1945 buildings that are BRAC property, only buildings 124, 131 (the chicken coop), and 149 (El Piojo Ranch House) are BRAC property. These structures, dating from the



Archeological work at Mission San Antonio de Padua, NPS photo

Consolidation Period, were determined ineligible for listing on the National Register of Historic Places. While it has some historic interest related to Hearst operations, Building 124 has been heavily altered and has lost its historical integrity. Both the original one-story residence and the 1930s–1940s addition are in fair to good condition, although the rear lacks a perimeter foundation. Building 131 has been well maintained and is in good condition despite its age. Building 149 is well maintained and appears to be in good condition. Although it has lost its historical integrity through alteration and relocation, Building 149 is the least altered and best structure of its type on Fort Hunter Liggett (US Army Corps of Engineers 2000b).

Additional historic structures in the vicinity of the ranch bungalows and Milpitas Hacienda include Building 111 (housing), Building 119 (blacksmith shop) and Building 120 (Tin Barn or Fire Station). These structures are not part of the BRAC excess property. Building 111 was built prior to 1945 and is most likely associated with the Hearst Ranch and the James Brown Cattle Company. This building was used by Fort Hunter Liggett for installation housing until 1990 when it was abandoned and boarded up. The exact date of construction of this building is unknown, but it was most likely built as a ranch house for either the Brown or Hearst cattle operations. Building 119 was originally a blacksmith shop that was part of the Hearst's Milpitas Ranch complex. Its exact construction date is unknown and it may have been built by the James Brown Cattle Company. Building 120, the Tin Barn, was built by the James Brown Cattle Company, reportedly using roof



St. Luke's church, NPS photo

trusses salvaged from the 1915 Panama Pacific Exposition in San Francisco. This building was also a part of Hearst's ranching operations. Fort Hunter Liggett reused this barn at different times as a Post Exchange, theater, library, and gymnasium, before it was converted for use by the Fire Department in 1988. All three structures were determined ineligible for listing on the National Register of Historic Places (U.S. Army Corps of Engineers 2000b).

JOLON AREA

Archeological Resources. Five archeological sites have been identified in the vicinity of the Jolon town site. However, only one archeological site is located on the Tidball Store site, CA-MNT-794H. The other sites in the vicinity of this area include CA-MNT-693H, the historic Jolon Town site; CA-MNT-1081H/1561H, Saint Luke's Episcopal Church; CA-MNT-1088H, Saint Luke's Cemetery; and CA-MNT-1562H, the Jolon Stage Route (US Army Corps of Engineers 2000b).

Five surveys have been conducted in the vicinity of the Gil Adobe. These surveys identified one archeological site, CA-MNT-963H, the Jose Maria Gil Adobe, which contains both archeological and architectural components. Three other sites have been recorded in the vicinity. These include CA-MNT-793H, the Portola Camp; CA-MNT-1089H, the Gil Family Cemetery; and portions of CA-MNT-1563H, the Camino Real/Caretta Trail. As of September 2000, an investigation was in progress to record a large, complex multi-component site between the Gil Adobe and the Gil Family Cemetery. The site includes prehistoric materials, historic fencing, and barn remains and is believed to have a high likelihood for human remains. This site is outside the BRAC property.

Historic Structures. Historic structures within the Jolon area include the Tidball Store, Saint Luke's Church and Cemetery, and the Dutton Hotel. All of these structures were built prior to 1940. The Dutton Hotel was constructed before Hearst purchased the land in 1920. All of these structures are listed on the National Register of Historic

Places (NRHP) as locally significant. The Tidball Store is the only historic building in this area on BRAC property. Saint Luke's Church and Cemetery and the Dutton Hotel do not belong to Fort Hunter Liggett. No other historic structures are located within this area (Eidsness and Jackson 1994b).

There are no other historic structures in the vicinity of the Jose Maria Gil Adobe (Building 640). The Gil Adobe was listed on the NRHP in 1974 as an individual property. Built in 1865, the structure was modified through the years. The Miller family that purchased the Gil land in 1909 modified the area to accommodate dairy operations. Additional modifications were made for military use between 1941 and the mid-1970s when the adobe served as Bachelor Officers Quarters (Eidsness and Jackson 1994b).

Visual Resources

The quality of visual resources surrounding the historic properties and the larger landscape setting are important to preserving their cultural resource values. Areas where the setting and surrounding landscape have remained intact from the pre-military era provide an opportunity to interpret the cultural resources in their historic context. While much of the vegetation within the cantonment area was replaced by military and residential land uses, the remainder of the installation retains highly scenic qualities associated with the rolling oak woodlands, oak savannas and riparian zones on the eastern side, and the chaparral covered peaks of the Santa Lucia Range on the west side.

Scenic landscapes on the installation can be experienced from travel on public roads. The Army permits public travel on Mission Creek, Del Venturi, Sam Jones, and Nacimiento-Fergusson roads as long as it does not interfere with training or testing activities. Training activities sometimes disturb ground forms and vegetation in areas visible from these roads. Other areas are disturbed in some locations by burning and fire control measures such as firebreaks, as well as by maintenance of roads and training facilities.

Views from Mission San Antonio de Padua are considered sensitive, and training exercises and vehicle movement are restricted near the Mission. Military convoys avoid use of Tank, Mission Creek, and Del Venturi roads on Sundays, and helicopters or other aircraft are prohibited over the Mission unless approved by Range Control. All military field training in that portion of the cantonment area, west of Silo and Sulphur Springs roads, is prohibited except for light infantry, which is restricted to the west side of the San Antonio River, south of Grid Line 86 (US Army Corps of Engineers 2000b).



Mission San Antonio de Padua, NPS photo

Public Use and Enjoyment

Under current management practices, visitor use at Fort Hunter Liggett is narrowly limited. Public access is usually permitted in the cantonment area and along Jolon and Nacimiento-Fergusson roads (including access to the Tidball Store). The Mission San Antonio de Padua is open to visitation and offers religious services. Visitors have the opportunity to explore the buildings, gardens, and cemetery. A museum fills a string of rooms behind an arched arcade that forms one side of the garden.

The Hacienda provides overnight accommodations and includes a main suite, mini-suite, four tower rooms (suites with queen-size beds), 2 garden rooms, and 3 cowboy rooms with shared baths. Guests can relax in the Milpitas Hacienda bar, which showcases a restored hunting mural and

fireplace. Patrons include Milpitas Hacienda serves casual lunches and dinners and is open daily. The restaurant is visited by Milpitas Hacienda guests, employees at Fort Hunter Liggett, military personnel, and visitors to the Mission. While no comprehensive visitation numbers exist, it is estimated that at least 22,000 people visit the Mission and Milpitas Hacienda area annually for a variety of purposes, and approximately 6,000 hunters and anglers for a minimum of 28,000 annual visitors. Most overnight visitors to the Milpitas Hacienda are Army personnel and their dependents. Another 15% of the overnight visitors are indirectly related to military (retirees and Department of Defense).

Hunting is the primary outdoor recreation use at Fort Hunter Liggett. Public access to training areas is limited to people with permits for hunting or fishing. Estimates of hunting and fishing use include 9,500 visitors in 2001 and 5,500 visitors in 2002. Use dropped significantly from previous years due to changes in the security measures as a result of terrorist attacks on September 11, 2001. It is estimated that use will remain at current levels for several years.

Fort Hunter Liggett has one campground located in the cantonment area west of Mission Road. The campground consists of an improved section with 24 camping sites and two toilets. It is primarily used by hunters. The campground store is currently non-operational (US Army Reserve Training Center, Fort Hunter Liggett, 2003). One- and two- bedroom rental units and recreational vehicle and tent camping with full hook-ups are available at nearby Lake San Antonio.

Visitors can drive through the installation and over the ridge to Big Sur via Nacimiento-Fergusson Road. Leaving the valley, Nacimiento-Fergusson Road meanders west over the Santa Lucia Mountains and through the Los Padres National Forest toward California Highway 1 and the Big Sur coast. Its winding route passes through live oak forests and meadows, and it takes more than an hour to navigate seventeen miles. As the road passes its 4,000-foot crest and

descends toward the Pacific Ocean, the coast appears below.

The Milpitas Hacienda may interest some Hearst Castle visitors. Between 1999 and 2001 the number of annual visitors at Hearst Castle varied from 767,818 to 839,858.

The growing wine industry may bring more visitors to the area if Jolon Road is developed as a wine corridor, a proposal included in the 2004 Draft Monterey County General Plan. Under this proposal the Jolon Road corridor would be allowed a certain number of commercial wine facilities that would be open to the public. Such visitors may be interested in the Milpitas Hacienda, Mission San Antonio de Padua, or the Jolon town site as these resources could be featured as visitor sites along the wine corridor.

Traffic and Circulation

REGIONAL ACCESS

Fort Hunter Liggett is situated approximately halfway between the Pacific Coast Highway (Highway 1) to the west and US Highway 101 to the east. Major regional north-south circulation in the vicinity of Fort Hunter Liggett is via Highway 101. Primary access is via Jolon Road (County Road G14), connecting with Highway 101 near King City, and secondarily via Nacimiento-Fergusson Road originating at Highway 1 near the town of Lucia. Access from the south is via Lockwood Road (County Road G18), connecting with Highway 101 near Bradley. Milpitas Road has provided access to the northwestern portion, connecting with Arroyo Seco Road/Carmel Valley Road (County Road G16) but this route is no longer passable.

Jolon Road is a two-lane road that extends north east to Highway 101 near King City and southeast from the town of Jolon to Lockwood and US Highway 101. The speed limit on Jolon Road is 55 mph. The two-lane Nacimiento-Fergusson Road extends from Mission Creek Road west through the installation, then over the mountain to Highway 1. There is no posted speed limit for most of the road, and travel speeds are generally limited by road conditions (US Army Corps of Engineers, 2000b).

LOCAL ROADS

The primary road network associated with the BRAC excess property includes Mission Creek Road, Infantry Road, and Alamo Road. Mission Creek Road and Infantry Road connect the cantonment area with more remote portions of Fort Hunter Liggett. With few exceptions, Fort Hunter Liggett roads outside the cantonment area are limited to public access and require a permit for entry (US Army Corps of Engineers, 2000b).

LEVEL OF SERVICE

Level of service (LOS) is a widely used system of describing traffic and driving characteristics at different intensities of traffic flow and congestion. LOS A indicates light traffic, and average travel

speed of about 90% of free flow speed. LOS B indicates moderate traffic. Average travel speeds drop due to intersection delay and inter-vehicle conflicts, but remain at 70% of free flow speed. LOS C signifies substantial traffic, longer queues at signals result in average travel speeds of about 50% of free flow speeds. LOS D is heavy traffic. Average travel slows down to 40% of free flow speed. Delays at intersections may become extensive. LOS E indicates very heavy traffic and unstable traffic flows. LOS F signifies saturated flow conditions, forced flow, and low operating speed.

Monterey County considers LOS “D” or better to be acceptable roadway operating conditions. Based on daily volumes and capacities, Mission Creek Road and Infantry Road operated at LOS “A” in 1991; 2,720 vehicles per day were counted in 1995. Jolon Road operated at LOS “A” and “B” in 1995. Highest volume was recorded at the section of Jolon Road between San Lucas Road and US 101, at 6,900 per day, equal to .575 volume-to-capacity, with an LOS “B” rating (US Army Corps of Engineers, 2000b). The Monterey County General Plan Update (2004 Draft) reports the LOS of Jolon Road between Pine Canyon Road (Lockwood) and US 101 to be a “C” rating.

The growth of the wine industry in Monterey County in recent years has led to a county proposal to establish winery corridors. The 2004 Monterey County General Plan (Draft) proposed three winery corridors for the County, one of which is Jolon Road. This designation, if implemented, could result in increased traffic on Jolon Road.

Air Quality

The portion of Monterey County in which Fort Hunter Liggett is located is in attainment with all federal ambient air quality standards. However, this area has been designated as being in non-attainment for the state 1-hour ozone standard and the state 24-hour inhalable particulate matter standard. For more details on air quality

standards, see section 4-3 of *Environmental Assessment for the Disposal and Reuse of the BRAC Property at Fort Hunter Liggett*, US Army Corps of Engineers, September 2000.

Existing air emission sources on Fort Hunter Liggett are generated by various testing and training activities. Tracked and wheeled vehicles within the training areas generate localized inhalable particulate matter, and are the primary sources of airborne dust at Fort Hunter Liggett. Fuel combustion during training and testing activities is a source of carbon monoxide, ozone precursors, and some inhalable particulate matter. Aircraft operations also create a minor source of emissions at Fort Hunter Liggett. Other air emission sources include controlled burning activities and emissions associated with obscurant uses such as smoke screens (US Army Corps of Engineers 2000b).

Noise

Major noise sources at Fort Hunter Liggett include on-station training activities and traffic on local roadways. Off site noise sources include vehicular traffic and recreational activities associated with the San Antonio Reservoir. Areas with high noise levels and major noise sources on Fort Hunter Liggett include: Schoonover airstrip and other landing zones; Tusi Army Helipoint; Multi-Purpose Range Complex (MPRC); and the B-9 Gunnery Range. The Milpitas Hacienda and the Mission San Antonio de Padua are considered noise-sensitive land uses. Sensitive noise receptors have been installed to monitor the impacts of noise on sensitive land uses (US Army Corps of Engineers 2000b).

Blast noise from the MPRC creates the greatest noise impacts associated with current activities at Fort Hunter Liggett. Military vehicles operating on paved and unpaved roadways are a minor source of noise in the area, with impacts confined mostly to areas adjacent to paved roads and tank trails. Individual vehicles will typically produce short-term noise levels to 65 to 70 decibels (dB)



Helicopter by Palisades area, NPS photo

at a distance of 50 feet from the roadway. Average noise exposure over a 24-hour period can be represented as a day-night average noise level (Ldn). Day-night sound levels in different areas vary over a range of 50 dB, and every 10 dB represents a doubling of perceived sound level. Levels occur as low as Ldn= 30 to 40 dB in wilderness areas and as high as Ldn= 85 to 90 dB in urban areas. Monterey County has set an Ldn range of 50 to 55 dB as the desirable noise limit for low density residential land uses, with an Ldn of 50 dB as the desirable limit for passively used open space areas.

Short-term monitoring was conducted at several locations at Fort Hunter Liggett on February 26, 1988. Daytime background noise levels were 40 dBA at most locations, with background noise levels of 42 dBA in the cantonment area. Day-night average noise ratings measure perception of sound over longer periods of time than typically spent by a visitor to a park. Depending on training activities occurring at the time of visit, significantly louder noise levels could potentially be encountered at Fort Hunter Liggett (US Army Corps of Engineers, 2000b).

Hazardous and Toxic Materials

CERCLA-RELATED SUBSTANCES

An Installation Restoration Program (IRP) was initiated at Fort Hunter Liggett in 1983. An IRP provides for the inventory of hazardous material sites and necessary remedial actions on federal facilities as required by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Since the initiation of an IRP, the Office of Environmental Compliance within the Fort Hunter Liggett Public Works Directorate has coordinated investigations and remediation activities on 34 sites throughout the installation. The sites include former underground storage tank locations, former hazardous waste accumulation areas, spill areas, former waste treatment plants, former fire training burn areas, a battery acid neutralization pit, the former base landfill, and firing ranges. Through fiscal year 2000, the Army completed remedial actions on 30 of 34 inventoried sites. The remaining four sites are the Fort Hunter Liggett Landfill #1, the former pesticide storage building, the motor pool facility, and the fuel depot. None of the 34 sites investigated, are located within the BRAC property.

ASBESTOS AND LEAD PAINT

The only hazardous materials known to be associated with the BRAC excess properties are asbestos and lead paint. A survey conducted in 1991 confirmed asbestos containing materials in the Milpitas Hacienda (pipe insulation, floor tile mastic), the Gil Adobe (transite sewer pipe), and Building 127 (HVAC system, floor tile mastic, roofing materials/ mastic). Although not confirmed, the Army inventory has assumed that there is asbestos-containing material in Building 131 based on its estimated construction dates (1910-1929).

No comprehensive lead-based paint surveys have been conducted at Fort Hunter Liggett although lead-based paint tests have been conducted for buildings 124, 127, and 149. Results indicated that buildings 124 and 127 contain lead-based paint. Other buildings that were built prior to 1978 may contain lead paint. This would include the Gil Adobe, the Milpitas Hacienda, the chicken coop (131) and Building 127.

Unexploded Ordnance (UXO)

In the course of implementing the 1995 BRAC decision for Fort Hunter Liggett, a preliminary investigation of unexploded ordnance was undertaken by the U.S. Army Corps of Engineers. Historic research and interviews with individuals associated with Fort Hunter Liggett regarding Ordnance and Explosive and Chemical Warfare Materials in use at the installation and on potential BRAC property were conducted by the US Army Corps of Engineers, St. Louis District. The research and interviews were compiled in *Archives Search Report Findings, BRAC Parcels, Fort Hunter Liggett* (September 1999). There is no UXO associated with the BRAC excess property.

Public Health and Safety

PUBLIC HEALTH AND SAFETY

This section describes the baseline conditions of existing public utilities infrastructure systems at Fort Hunter Liggett including the potable water, sanitary wastewater, solid waste, electricity, telecommunications, and propane.

Fort Hunter Liggett obtains all cantonment area domestic water from two local groundwater basins, the San Antonio Basin and the Jolon - Lockwood Basin. Because groundwater is most abundant in deposits of alluvial materials or porous rock, the eastern portion of Fort Hunter Liggett has larger supplies of groundwater than the mountainous Monterey Formation in the west.

The Jolon fault runs parallel to the east of the San Antonio River. This fault separates the Lockwood Groundwater Basin to the east from the San Antonio Basin to the west, and prevents mixing of the waters of the two basins. The San Antonio Basin is estimated to have usable groundwater storage of 35,000 acre-feet, whereas the Lockwood Basin could contain 250,000 acre-feet of usable water (US Army Corps of Engineers 1995).

A hydrologic assessment of the availability of groundwater in the Fort Hunter Liggett area was conducted for the Army in 1984. The groundwater

assessment tentatively determined that the Mission San Antonio Basin has an annual safe yield of 10,000 acre-feet (U.S. Army Corps of Engineers 1989). Total Fort Hunter Liggett well water consumption averages between 300 and 350 acre-feet per year. The Mission San Antonio Basin consists of approximately 6,000 acres and is nearly totally contained within the Fort Hunter Liggett boundaries. The Jolon-Lockwood Basin consists of over 12,000 acres. Most of this basin is outside Fort Hunter Liggett boundaries. The total non-Army use of this basin is estimated between 50 and 100 acre-feet per year (US Army Corps of Engineers 1995).

Groundwater quality at Fort Hunter Liggett is considered generally good, although supporting data are limited. Groundwater quality varies according to location and depth. A 1980 study indicated that Fort Hunter Liggett groundwater had low levels of chlorides, nitrates, iron, and magnesium, but that it was slightly alkaline (average pH of 7.6) and prone to hardness, particularly near Sulphur Springs. A water quality analysis by the Fort Hunter Liggett Department of Public Works in 1988 indicates that groundwater hardness, alkalinity, and mineral content have changed very little, if at all, since the earlier study (US Army Corps of Engineers 2000b).

Fort Hunter Liggett's cantonment area is supplied with domestic water by three supply wells drawing from the Mission-San Antonio Basin and the Jolon-Lockwood Basin. The wells are located outside the BRAC excess property. Two are located south of the Jolon town site and one is located one mile south of the North Cantonment Geographic area. The water supply is chlorinated prior to distribution and is tested quarterly (US Army Corps of Engineers 1989). The Jolon area, containing the Gil Adobe and other outlying structures are served by individual wells of unknown condition.

The water system improvements installed in the late 1980s and early 1990s included a fire flow capability with hydrants throughout the cantonment area. The storage and distribution

system was designed for an installation population of 4,900 persons and 81,000 gallons per day for irrigation.

The main cantonment area is served by a gravity sewer system, consisting of over 16,000 linear feet of sanitary sewer line ranging from 4 to 18 inches, and an oxidation lagoon sewer treatment plant. The sewer lines range in age and condition from the vitrified clay lines constructed in the 1930s for the Hacienda to new lines installed during the construction of the Spanish Oaks and Milpitas family housing areas. The oxidation lagoons were constructed in 1972, and are located in the southeast portion of the cantonment area, outside the BRAC excess property, between Mission Road and the San Antonio River. The lagoons have a design capacity of 1 million gallons per day. As recently as 1995, sewage flows averaged less than 10% of the design capacity. During the wet season, sewer infiltration and storm drain connections significantly increase flows. 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. The irrigation site is fenced to impede public contact.

The Jolon area, containing the Gil Adobe, and other outlying areas, including the Tidball Store have previously been serviced by on-site sewerage disposal systems. The condition or characteristics of the systems serving the referenced excess property is unknown, but presumed to not meet current standards, requiring either connection to the existing system or possible installation of a new onsite disposal system. Future use of the excess property is expected to influence viable sewerage disposal options.

Solid waste at Fort Hunter Liggett is collected by the Pacific Valley Disposal Company, a private contractor. Prior to collection, non-hazardous solid wastes are accumulated at the Fort Hunter Liggett Transfer Facility on Nacimiento-Fergusson Road. The transfer station is not on, or immediately adjacent to, BRAC property.

The Army owns the electrical system within Fort Hunter Liggett boundaries. Fort Hunter Liggett contains 182,634 linear feet of overhead service line, 181,838 linear feet of underground lines, and 120 transformers. Gasoline generators provide backup power. In 1994, approximately 90 percent of the power transmission lines at Fort Hunter Liggett were upgraded. Electrical demand at Fort Hunter Liggett in 1990 was 12,463,512 kilowatt hours (kWh). In 1998, electrical demand was 8,465,467 kWh (US Army Corps of Engineers, 2000b).

The telecommunications system at Fort Hunter Liggett is owned and operated by the Army. Recent upgrades include the installation of fiber optic network connections in 2000. The system includes a three-position, 1,000-line, all-dial switchboard on retained Army property. A combination of above and below ground lines connects individual buildings and some remote training area stations with the switch. Pay telephones are connected to the Fort Hunter Liggett signal frame and then to the Pacific Bell commercial system at King City (US Army Corps of Engineers, 2000b).

Heating equipment at Fort Hunter Liggett uses propane gas provided by an area distributor. A propane tank typically serves each building, however a single tank serves all 57 units within the Milpitas housing area including Javelin Court.

FIRE, LAW ENFORCEMENT AND EMERGENCY MEDICAL SERVICES

Fires at Fort Hunter Liggett are caused by natural occurrence, training or other human activity, and controlled burns. Fort Hunter Liggett operates its own fire department, a full structural fire rescue and natural resources firefighting unit. As of April 1999, the Fort Hunter Liggett fire station employed 25 full-time firefighters, of whom 24 were trained as emergency medical technicians (EMTs) and 10 were certified in hazardous material and waste safety training.

The Fort Hunter Liggett Fire Department also operates under the Natural Resources Fire Prevention Program. The program includes

methods to reduce fuel loads at Fort Hunter Liggett through controlled burning and prescribed burning. Controlled burning of ranges and firing sites helps reduce the overall fuel load of areas commonly used for live-fire exercises. Prescribed burning for chaparral management occurs regularly at Fort Hunter Liggett. The Fort Hunter Liggett Fire Department has adopted a controlled burn plan to detail how often and how much is burned at Fort Hunter Liggett. Because military training occurring in the summer has the potential to ignite summer wildfires, Fort Hunter Liggett conducts annual control burns each spring/summer, when fires can be kept cooler and more controlled than wildfires. These controlled burns are primarily in grasslands and savannas within an area of nearly 30,000 acres where military units use pyrotechnic devices as part of training (Clark 2000). Fires are also used to reduce star thistle, break up even-aged stands of chaparral to improve wildlife habitat, and reduce cattail stands at reservoirs. Firebreaks have been established along portions of the installation boundary and within the installation to help keep fires ignited on Fort Hunter Liggett from escaping onto adjacent land and to impede the spread of wildfire and provide access for firefighting equipment. Existing firebreaks are routinely maintained, and new firebreaks are occasionally cleared in emergencies for suppression of wildfire.

Fort Hunter Liggett has mutual aid agreements with Los Padres National Forest and California Department of Forestry and Fire Protection to



Fire station, NPS photo

outline responsibilities and procedures for fire emergencies at Fort Hunter Liggett. Agencies that have automatic aid agreements with Fort Hunter Liggett are Camp Roberts Military Installation in San Luis Obispo and the South Monterey County Fire Protection District. Air quality permits for controlled burns are coordinated with the air resources control board (US Army Corps of Engineers 1995). The Los Padres National Forest has located a fire-fighting unit at Fort Hunter Liggett, and is using installation housing for their expanded wildland fire suppression crews.

Fort Hunter Liggett has a civilian federal police force of 23 officers. The federal police station is located in the cantonment area. Three officers are EMTs and are also certified in hazardous material and waste safety. At least three officers must be on duty during each 12-hour shift.

The installation's Health Clinic has been closed since 1998. Fort Hunter Liggett relies on its fire department for EMT services. The closest 24-hour emergency care facility is the George L. Mee Memorial Hospital 22 miles away in King City.

Regional Economy

SURROUNDING LAND USES

The installation is abutted to the west and north by the Los Padres National Forest and on the east and south by private agricultural land. The U.S. Forest Service (USFS) manages Los Padres National Forest lands according to the Los Padres Land and Resource Management Plan (USFS 1988). Also managed by the USFS is the Ventana Wilderness Area, an area of ruggedly beautiful coastal mountains, which straddles the Santa Lucia Mountains south of the Monterey Peninsula. Non-federal land uses surrounding Fort Hunter Liggett are regulated by the Monterey County General Plan and the San Luis Obispo County General Plan. Agricultural zoning (or other low-density uses) is the major land use designation for these areas. The nearby Lake San Antonio recreational area is managed for public use by Monterey County Parks Department.

The nearest population area is Lockwood (population less than 1,000), approximately 6 miles east of the main gate. King City (population of 11,000) is the nearest incorporated city, approximately 23 miles to the northeast. Salinas is the largest nearby population center with 143,776 persons, 36% of the County population (Monterey County 2004). Camp Roberts, the closest neighboring military installation, is 29 miles to the southeast. Camp Roberts is connected to Fort Hunter Liggett by a tank trail maintained by Fort Hunter Liggett.

LOCAL ECONOMY

Between 1990 and 2002, Monterey County's population increased from 364,000 to 409,600. A projected population increase to 591,000 by 2020 would represent an increase of 44% over the current population (California Employment Development Department 2002). The civilian labor force for Monterey County in 2001 was 195,800, with an unemployment rate of 9.3%. The state's unemployment rate for the same year was 5.3%. Approximately 40% of county jobs are in the agriculture and tourism sectors. Wages in these two sectors are significantly lower than in other industries. Over 90% of these employees are in the lowest income bracket (\$14,000 to \$30,000) (Monterey County 2004).

Agriculture accounts for 22.9% of total employment countywide. In 1999, agriculture was a \$2.5 billion industry in Monterey County. The services division accounts for 22% of employment, and government makes up over 18% of total employment. Projections for Monterey



Local vineyards, NPS photo

County's future nonfarm wage and salary employment estimate most growth will occur in services, retail trade, and government. The service industry is expected to add 7,000 jobs by 2006. Retail trade is expected to add 2,900 jobs. Since 1995, Monterey County has recorded continuous growth in total nonfarm employment. Cumulative growth from 1995 to 1999 was 16.4%. In 1999, Monterey County showed 4.9% growth in the non-farm sector, compared to the statewide average of 2.8% (California Employment Development Department 2002).

The largest employers in nearby King City are associated with the agricultural industry – vegetable dehydration, vegetable growing and shipping, wine grape production, and grain and bean processing. Additionally, there are a growing number of local wineries and vineyards.

The budgets of the local government jurisdictions of the cities of King City, Jolon, Paso Robles, Soledad, and Salinas, as well as Monterey and San Luis Obispo counties, are affected by the presence of Fort Hunter Liggett. Costs to these jurisdictions are incurred by the use of educational and other services by Fort Hunter Liggett residents. Federal aid is provided to local schools to offset property taxes that would have been paid by residents living on federal property. Fort Hunter Liggett provides an economic stimulus to the local economy by contracting for construction projects and maintenance at the installation, by providing housing to installation personnel, and through military and civilian personnel and their dependents patronizing local businesses. Fort Hunter Liggett's total operating budget for fiscal year 2001 was \$24,559,400 (Department of the Army 2001).

Environmental Justice

Presidential Executive Order 12898 requires federal actions to address environmental justice in minority and low-income populations. The intent of the executive order is to avoid any disproportionate adverse environmental, human health or economic

impacts from federal policies and actions on minority and low-income populations.

According to 2000 US Census Data, 47% of Monterey County's population is Hispanic or Latino, 40% is White, 6% is Asian, 4% is African American, and the remaining 3% are Native Hawaiian or Pacific Islander, multi-race or other non-specified race (California Department of Finance 2004). In King City, 66.7% of the population is Hispanic or Latino, 31.1% is White, 0.9% is Asian, 0.6% is African American and 0.7% is other non-specified race (King City 2003).

The 1999 median family income in Monterey County is \$48,305. In King City the median family income is lower because a large percentage of jobs are in the agricultural, manufacturing, and retail sectors. In 2000, the median family income in King City is \$34,398. Monterey County defines very low income as 50% of the median household income. Based on this standard, approximately 45% of King City's population is very low income when compared to the county-wide median income. When compared to the King City median income, over 20% of the households have very low income. In 2000, low income households in King County could not afford to buy a single-family home, but could afford the majority of apartment rentals in King City (King City Housing Element 2003; Monterey County 2004).