

FY 2010 SECRETARY OF DEFENSE ENVIRONMENTAL AWARD
CULTURAL RESOURCES MANAGEMENT - INSTALLATION
MARINE CORPS BASE CAMP PENDLETON

INTRODUCTION



Bedrock milling associated with the ethnohistoric Luiseño village of Pomameye, Camp Pendleton

Marine Corps Base (MCB) Camp Pendleton has successfully integrated the protection of cultural resources while enhancing and facilitating the base mission to train Marines. This has been accomplished by developing close coordination and communication with a range of stakeholders, including base operators and facility managers, California State Historic Preservation Officer (SHPO), Native American tribes, and the public. The Cultural Resources Management Program (CRMP) has survey coverage of all non-live fire impact areas on this 125,000-acre installation. This has been guided by a base-wide research design and Integrated Cultural

Resources Management Plan (ICRMP) prepared as one of the nearly 116 documents that have been completed in the past several years. A total of 90,000 acres of the base have been systematically surveyed and 607 sites have been recorded. A total of 446 sites have been evaluated for eligibility with 75 eligible and three listed on the National Register of Historic Places. Through a fully funded restoration program, the CRMP has successfully removed the Las Flores Adobe Ranch House from the list of most threatened National Historic Landmarks (NHL) and completed a historic structures report on the Santa Margarita Ranch House. The base works with 19 Native American Tribal Governments for National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), and Native American Graves Protection and Repatriation Act (NAGPRA) compliance.



Pictograph site associated with the ethnohistoric Luiseño village of Topomai, Camp Pendleton

BACKGROUND



**Marines coming to Camp Pendleton
1942**

The mission of MCB Camp Pendleton is to operate a training base that promotes the combat readiness of the Fleet Marine Forces and other tenant commands by providing training opportunities, facilities, services, and support responsive to the needs of Marines, Sailors, and their families. MCB Camp Pendleton is the Marine Corps premier amphibious training base and its only West Coast amphibious assault training center. The

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MCB Camp Pendleton has been conducting air, sea, and ground assault training since 1942, providing a unique combination of natural and military resources for the training of Marines and other DoD personnel. For 68 years, the base has served as one of the Nation's most important training bases and has contributed substantially to the success of our national security forces in conflicts and missions worldwide.

MCB Camp Pendleton occupies approximately 125,000 acres of coastal Southern California. The base consists of dispersed cantonment areas, firing ranges, maneuver areas, and impact areas which comprise approximately 24,000 acres. Aside from a portion of the base's border that is shared with the San Mateo Wilderness Area and the Fallbrook Naval Weapons Station, surrounding land use is urban development, rural residential development, and agricultural farming and ranching.

MCB Camp Pendleton provides training facilities for active duty and reserve Marine, Navy, Army, Air Force, and National Guard units as well as other national, state, and local agencies. The base supports a daytime population of approximately 70,000 military and civilian personnel. Similar to local municipalities, the base provides military service members and their families with support facilities and services, including housing, water and sewage service, solid waste disposal, medical and dental services, schools, childcare, employment assistance, and recreation opportunities. It currently has more than 5,000 buildings and structures, 500 miles of roads, and nearly 1,000 miles of utility lines base-wide.

Mission support activities on MCB Camp Pendleton include natural resources management; fire management; infrastructure, facilities, and grounds maintenance; and morale, welfare, and recreation community services. Recreational services provided are natural resources related recreational opportunities such as beach use, hunting, fishing, hiking, and camping. Most of these services are also available to the general public.

Additional land use on MCB Camp Pendleton occurs in the form of leases, easements, and other real estate agreements. Existing real estate agreements cover approximately 28,500 acres of the base and include agricultural leases for row crop production, San Onofre State Park, public utilities (including San Onofre Nuclear Generating Station), and transit corridors (including Interstate 5).

PROGRAM ACCOMPLISHMENTS

Program Summary

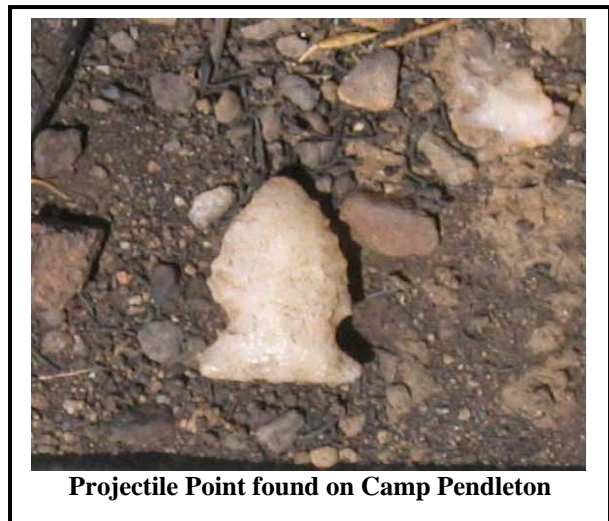
The mission of the Cultural Resources Management Program (CRMP) is to support the training of Marines through responsive and proactive program management. In FY 2010, the CRMP reviewed and commented on over 360 categorical exclusions requests, participated in oversight and review of major infrastructure military construction (MILCON) projects, construction and upgrades of training ranges, and completion of 37 cultural resources site assessments within the major training corridor on the base.

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The MCB Camp Pendleton ICRMP calls for the accomplishment of six specific goals: complete field survey of all cantonment and training areas; complete National Register eligibility evaluation of all prehistoric sites currently on the Camp Pendleton Archaeological Geographic Information System (CPAG); complete rehabilitation of the Las Flores Adobe Ranch House; provide project support to the Planning, NEPA, Wildlife, and Land Management branches of the Assistant Chief of Staff, Environmental Security (AC/S, ES); provide continued support to the Base Fire Department in assessing potential impacts to cultural resources in areas proposed for controlled burning; institute a plan, which includes funding, to complete regular monitoring of sites on the base to ensure that they have not been affected by training, and to facilitate future training activities and operations; evaluate all of the archaeological sites within the Red Beach/Las Pulgas Training Corridor. To date, the base has made great strides towards meeting each of these goals. Specific accomplishments are described below:

Overall Cultural Resources Management

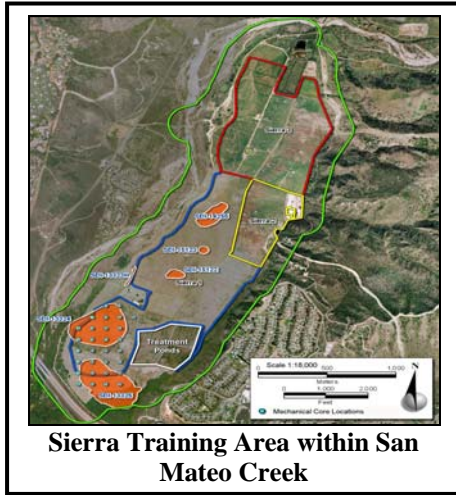
Since 1996 the CRMP has carried out long-range programming of intensive Phase I survey of the training areas and cantonment areas of MCB Camp Pendleton. As of FY 2010, the goal of completing intensive survey of all training and cantonment areas is nearly complete with 89 percent of the entire base non-live fire impact areas surveyed for cultural resources. The CRMP has worked to enhance and facilitate the base's mission through close coordination with a wide range of stakeholders, including the operators, facility managers, Base Fire Department, the Planning and Resources Divisions of AC/S, ES, California SHPO, Native American tribes, and the public. By dealing directly with the Assistant Chief of Staff, Operations and Training (AC/S, O&T), the Cultural Resources Branch is able to identify future training priorities permitting earlier National Register eligibility evaluation of sites, in many cases, opening up more training areas and causing fewer training delays. Also, through working with the AC/S, O&T, the program can identify sites within training areas that can be used in certain training scenarios with appropriate restrictions, thus permitting greater use of MCB Camp Pendleton's land base. The same approach is used in working with the AC/S, Facilities to identify infrastructure project needs well in advance which leads to better coordination with the AC/S, ES Planning Division. By consulting frequently and openly with the California SHPO, Native American tribes, and public, potential roadblocks are identified and avoided.



In FY 2010, the Cultural Resources Branch contracted for MCB Camp Pendleton cultural resources monitoring services to implement a Condition Assessment, Site Monitoring, and Effects Treatment plan which is the important site-monitoring goal of the ICRMP and has programmed budget requests for future site monitoring services required by this goal.

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Success Story # 1: Sierra Training Area



Sierra Training Area within San Mateo Creek

The AC/S, O&T has identified the Sierra Training Area as one of their highest priority training areas. This is a land conversion of former agricultural fields in the San Mateo Area to a training area. In addition to conducting the Section 106 consultation in support of this land conversion, the Cultural Resources Branch focused its stewardship program to conduct extensive fieldwork and research to thoroughly identify and characterize the archaeological resources present throughout the 634-acre former agricultural fields. Studies conducted included geomorphological studies, paleoenvironmental reconstruction, and remote sensing. This work confirmed that intact archaeological deposits were originally buried by up to two meters of alluvium. This program opens up

more area for training Marines and creates an efficient management process. In addition to traditional management, the CRMP has encouraged the use of innovative techniques for the evaluation of these sites. A specially designed split barrel core was used to sample the archaeological and geomorphological context of study area. The coring program allowed for detailed subsurface evaluation with less overall disturbance than would be the case using traditional trenching and excavation techniques, in particular considering the maximum depth of boring was in excess of 800 cm.



Coring Phase in Sierra Training Area

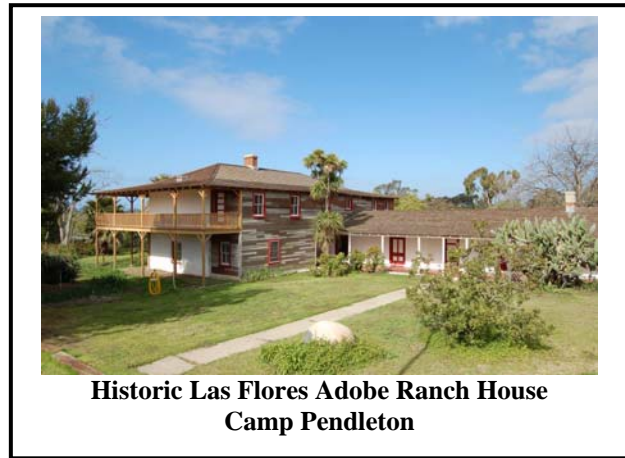
Success Story # 2: Cultural Resources Management

The CRMP works to enhance and facilitate MCB Camp Pendleton's mission by implementing a stewardship (awarded \$770K in FY 2010 and \$1,050,000 in FY 2009) to actively identify cultural resources which enables early consultation with key stakeholders, including operators and facility managers, California SHPO, Native American tribes, and the public. By consulting frequently and openly with all these stakeholders, potential roadblocks to training and operations are identified early and avoided or minimized.

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Historic Buildings and Structures

An example of this effort is evident in CRMP's continued rehabilitation of the Rancho Las Flores Adobe Ranch House, a NHL, which was formerly considered one of the most endangered NHL structures in the United States. This important house is being rehabilitated through a cooperative agreement with the University of Vermont Historic Building Conservation Program. The CRMP developed the costing for the work and entered it into the annual Program Objective Memorandum and presented the justifications and requirements to fund the work. By engaging with the University, MCB Camp Pendleton forged an alliance that continues to assist in and provide cost effective long-term preservation of this important structure. Most importantly the structure is no longer considered an endangered NHL and is becoming an asset to MCB Camp Pendleton.



Curation

Curation of artifacts is a significant issue with most federal agencies. MCB Camp Pendleton was the first agency to curate artifacts and records with the San Diego Archaeological Center leading the way for other federal, state, and local agencies to house their collections at this facility. MCB Camp Pendleton houses over 600 cubic feet of artifacts and 100 cubic feet of records at this facility at an annual cost of less than the equivalent of one staff person. The San Diego Archaeological Center fully complies with 36 CFR 79 (i.e., Curation of Federally-Owned and Administered Archaeological Collections). By curating the artifacts and records at the facility they are easily accessible for continuing study by qualified researchers and tribal members.

Data Management

MCB Camp Pendleton has continued the development begun in 1996 of a practical and useful Geographic Information System (GIS) program for the management of data recovered from archaeological studies. The system is known as the Camp Pendleton Archaeological GIS (CPAG). Initially the system was developed on an ARCVIEW 3.2 platform. In FY 2009, the CRMP funded a full revision and data update of the system to ArcGIS (ArcMap 9.3.1). The project was in process during FY 2010 and it will be completed in FY 2011. CPAG provides a retrievable database that can be accessed in layers. Although the program is fully integrated with the main GIS system used by the AC/S, ES and Public Works, it is secure with access approved through the CRMP. Data are retrieved by use of preprogrammed queries, including cultural resources (site data, natural resources status), management status (study type, references, geomorphology, and mitigation), and location (base, training areas, roads). The database includes all site forms as "pdf" files, 60 site attributes, UTM coordinates, survey coverage,

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geomorphology, elevations/contours, and bibliographical information. Links to site form and photograph data layers are also provided. Since the survey is essentially complete on the base, the data elements are now updated annually as sites are evaluated for National Register status. The GIS program provides real time answers to questions regarding training and operations, new construction, and other proposed land uses. In addition to the enhanced management of cultural resources, the GIS is available for archaeologists to use for academic research. The site database and mapped data have been supplied to the California SHPO South Coastal Regional Information Center along with annual updates provided.

Public Outreach



In FY 2010 (20-21 October 2009), MCB Camp Pendleton celebrated California Archaeology Month with two days of cultural resources public outreach, including academic and educational archaeology as well as cultural activities at the Las Flores Adobe Ranch House. Participants were given tours of the historic house, the San Antonio (Las Flores) Estancia, the ethnohistoric Luiseno village of Huiseme, the historic site of Pueblitos, and a Native American Rock Art site. The second day was designated "Children's Day" and included age-appropriate archaeology and cultural activities. The children were divided into groups and rotated among the various exhibits, including an opportunity to make their own baskets with instruction from the California Indian Basketweavers Association members. The children also got to hear Acjachemen women sing songs in their language and listened to a

Luiseno traditional story shared by a Luiseno storyteller. They experienced "hands-on archaeology" and were able to conduct "mock" archaeological excavations and analysis assisted by professional archaeologists and staff from the San Diego Archaeological Center. Over 60 adults and 75 children participated in this two-day event.

Training

An important element of MCB Camp Pendleton's CRMP includes the training and education of the numerous and various organizations that use base lands. This program is coordinated and delivered through the AC/S, ES Training Branch and provides current cultural resources information to unit environmental officers and representatives.

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Success Story # 3: Mission Support for Facilities and Infrastructure

In FY 2010, the Cultural Resources Branch successfully completed fast-paced and intensive Section 106 consultations for 45 Marine Corps facilities and infrastructure MILCON projects within six months of initiating consultation. These projects included 39 undertakings in support of the Grow the Force (GTF) initiative and six Base-wide Utilities Infrastructure (BUI) undertakings. The GTF undertakings involved 158 buildings and eight archaeological sites with a combined project area of 585 acres. The BUI undertakings involved 74 archaeological sites and two sewage treatment plants over a 110-kilometer linear survey area. Thirty of the seventy-four archaeological sites are eligible for the National Register of Historic Places. The BUI undertakings involved an adverse effect finding and development, negotiation, and execution of a Programmatic Agreement with the California SHPO, five federally recognized Native American tribes, four non-federally recognized Native American tribes, and the San Diego County Archaeological Society. These projects are valued at over \$4B with resources dating from 7,000 years before present through the historic period.

