

2024 Secretary of the Army Environmental Awards



USAG Fort Bliss



Cultural Resource Management – Large Installation

Introduction

Fort Bliss is a multi-mission United States (U.S.) Army installation encompassing approximately 1.12 million acres in western Texas and south-central New Mexico. The Fort Bliss land area is in El Paso County, Texas, and Doña Ana and Otero counties in New Mexico. Fort Bliss was first established in 1849 with its present location dating from 1891. Currently, the installation is home of the 1st Armored Division and serves as a Power Projection Platform for regular Army, Army Reserve, and Army National Guard troops mobilizing for deployment.

The Fort Bliss Training Center (FBTC) provides the largest contiguous tract of restricted airspace in the largest maneuver

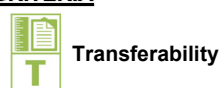
area. The FBTC comprises of several major physiographic features including the Organ Mountains, the Tularosa Basin, Otero Mesa, and the foothills of the Sacramento and Hueco Mountains.

Fort Bliss is also the home of the first national monument directly managed by the U.S. military since the 1930s. By Presidential Proclamation, Castner Range, which hosts significant cultural resource sites documenting the history of Tribal Nations, was established as the Castner Range National Monument on 21 March 2023.

Background

Fort Bliss is the second largest military installation in the continental U.S. The Cultural Resources Management Team

JUDGING CRITERIA



(CRMT) consists of archaeologists and architectural historians. The CRMT works collaboratively to continue the program’s mission to identify and manage the significant cultural resources on the installation and maintaining Fort Bliss in compliance with all respective federal rules, regulations, and laws.

Fort Bliss cultural resources are managed and protected through historic preservation laws, regulations, and other provisions including the implementation of the 2022 Integrated Cultural Resource Management Plan (ICRMP) and two active Programmatic Agreements (PAs). The Fort Bliss Cultural Resources Management Program (CRMP) intentionally designed these documents to enhance and streamline review processes. Both PAs are with the Texas and New Mexico State Historic Preservation Officers (SHPO), and the Advisory Council on Historic Preservation (ACHP) to conserve and protect cultural resources on Fort Bliss lands.



The Fort Bliss 2022 ICRMP uses an integrated and adaptive management approach of cultural and historic resources in cooperation with various stakeholders for sustainability and consistency with the military mission on Fort Bliss.



Meet the team (left to right). Elia Perez - Archaeologist, Martha Yduarte – Archaeologist, D.J. Sevigny, Architectural Historian, Fabiola Silva – Archaeologist (unavailable), Nathan Montalvo – Archaeologist (unavailable), within the Cactus Garden of the former William Beaumont General Hospital complex. During World War II, the Cactus Garden contained over 1,500 different species of plants and cacti.

Program Management

Fort Bliss manages more than 20,600 archaeological sites and 465 historic buildings, structures, and landscapes. As such, the CRMT works closely with the Integrated Training Area Management Program (ITAM) to identify locations that require an archaeological monitor, and/or mitigation of portions of historic properties.



The CRMT works closely with other divisions within the Directorate of Public Works (DPW) and outside stakeholders to ensure new projects and ongoing maintenance comply with federal and Army regulations.



The CRMT is currently working on updating all aspects of the PA. The CRMT is also updating a similar PA covering activities undertaken by the installation’s privatized housing partner to encourage the use of imitative substitute materials where appropriate.



Both PAs streamline the management of cultural resources. This approach allows for innovative and/or alternative mitigation strategies, when applicable, for an effective and cost-saving compliance with the National Historic Preservation Act (NHPA). Many large archaeological sites contain very high densities of artifact concentrations and features. Sampling strategies in data recoveries allows for a more cost-effective analysis that also meets the requirements of approved research designs. The PAs also facilitate maintenance activities of varying complexity by delegating the review authority from the SHPOs to the CRMT, ultimately streamlining the majority of work.



Accomplishments



The CRMT updated and successfully completed the 2022-2027 ICRMP in 2022. The installation is currently operating under that comprehensive document that addresses

all aspects of cultural resources management.

Maintaining Significance and Research Standards



The CRMT is currently addressing comments from Texas and New Mexico SHPOs associated with the prehistoric site guidance document *Significance and Research Standards*. Revisions to the document were based on results of more than a decade of research. Therefore, chronology of the region has been updated along with additional historic contexts for all periods (i.e., Paleoindian, Archaic, Formative, Protohistoric, and Historic), as well as cumulative results from



geomorphological studies. As part of the PA, this living document supports the implementation of the ICRMP.

In February 2023, during military training, a unit inadvertently trespassed onto an environmental Off-Limits Area known as Red Zone 7. This resulted in damage of two historic properties. The results of the investigation determined that the trespass was inadvertent and not an Archaeological



Resource Protection Act violation. Lessons were learned by all. For the CRMP and



CRMT, this incident is now used during monthly Environmental Officer Training courses as “what not to do.” Physical



barriers were added to the perimeters of Red Zone 7. Since excavation is not allowed in Red Zone areas, an alternative measure was proposed to survey a one-of-a kind site known as Hill 100 which is vastly littered by middens dated between A.D. 500-1100.



Therefore, the goal is to complete a Transect Recording Unit (TRU) survey of the area (255 acres), document and photograph all features and diagnostic artifacts using the current *Significance and Research Standards*.

Castner Range National Monument

By Presidential Proclamation, Castner Range became a national monument on March 21, 2023. The CRMT consults with the Interim Superintendent of the national monument. More specifically, the CRMT’s Architectural Historian is assisting the



Interim Superintendent monument to provide background information to complete the Presidential Proclamation and to interpret the monument’s extensive history.



The major themes will include the initial development under the 1st Calvary Division, rapid expansion through public works projects leading up to World War II (WWII), its use to support anti-aircraft artillery training during the early Cold War, and its use during the Vietnam War to hold a mock Vietnamese training village. Castner Range National Monument is currently under the control of the U.S. Army. This has created a unique opportunity to enter into partnerships with a varied group of interested parties.



Historic Buildings and Structures



The CRMT also supports retrofitting existing historic properties to improve their energy efficiency. Through collaboration with DPW’s Sustainability and Energy Division (DPW-SED) light fixtures on 141 buildings throughout the installation were retrofitted with light-emitting diode (LED) lighting to provide energy efficiency. A total of 338 exterior light fixtures and 4,441 interior light fixtures on 23 historic buildings were retrofitted with new LED fixtures. The CRMT determined the old fixtures did not contribute to their historic integrity during project planning, facilitating its completion to meet DPW-SED’s energy conservation measures.

Lower Beaumont

In May of 2021, the CRMT re-evaluated the Arroyo Landscape of the former William

Beaumont General Hospital primarily comprised of a two-acre Cactus Garden and half-mile long stone-paved drainage ditch constructed during the Great Depression. These resources were not included in the General Fund Enterprise Business System, requiring an update from the DPW’s Master Planning Division.



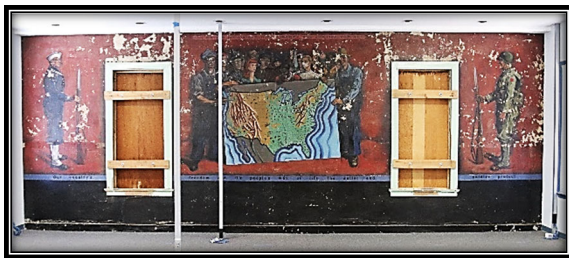
After 50 years of neglect, the CRMT spearheaded an effort to clear out all built-up sediment and overgrown brush.



Completed in August 2023, this work will allow the CRMT to prioritize future repairs to the ditch and organize volunteer opportunities to improve the Cactus Garden, which remains the largest known desert garden in Texas. Doing so will benefit the adjacent middle school, Young Men’s Christian Association, and community.



Nearby, the former hospital’s library contains a WWII-era mural. The building received extensive repairs to its three porches and a new asphalt shingle roof. The CRMT received funding to restore the mural which remains in stable, but poor condition.



Baron Rudolph Carl von Ripper painted this mural in 1943. It expresses his gratitude to the Army for allowing him to continue his personal fight against fascism. The mural will be restored in 2023-2024.

Supporting Innovative Construction



During 2021-2022, the CRMT facilitated NRHP regulatory compliance for the construction of two 3-D printed barracks for the Army to test the construction method in the harsh desert environment. The new barracks are one story in height and have a color scheme to blend into the adjacent Cold

War-era guided missile training laboratories. After over a year of construction, completion is quickly approaching at the time of this writing.




In 2021-22, the CRMT supported the construction of a pair of 3-D printed barracks within the historic view sheds on the Main Cantonment. The new barracks blend into the nearby Cold War-era guided missile labs. These barracks will be the largest 3-D printed buildings in the western hemisphere.


Curatorial Facility

The Fort Bliss CRMP maintains a state-of-the-art 36 CFR 79 (Curation of Federally Owned and Administered Archaeological Collections) compliant curatorial facility with more than 8,255 ft² of climate-controlled storage, and houses more than 3,169 ft³ of artifacts and their associated site files, photographs, field records, and historic maps, derived from nearly 1,288 archaeological projects. The Fort Bliss Curatorial Facility contributes to the Fort Bliss CRMP mission by implementing a curatorial program which strides to organize and preserve material remains, associated documents and datasets that will allow for proper identification, planning, and programming for cultural resources management.




Fort Bliss has been in the forefront of digitization projects that include files that have an inherent short life span as data quickly becomes obsolete. Migration projects have upgraded 1,530 databases and 5,871 spreadsheet files that would have otherwise been unreadable. To ease the accessibility of files, 30,000 architectural drawings, 20,000 site file folders, and 111 ft³ of project files have been scanned. More recently in 2022, a project to photograph 2,000 special collections was completed to

 bring the total of digitized special collections to 4,000. All these projects have significantly reduced the time needed to fill data requests, which, in turn, reduces labor cost.

 The Fort Bliss Curatorial Facility has an excellent working relationship with local museums. In 2023, the facility was able to acquire four 170-year-old marble panels, listed as surplus artifacts from the 1st Armored Division Fort Bliss Museum. The panels were originally from the grave marker of Lieutenant Colonel William Smith Bliss, whom the installation was named after. Lieutenant Colonel Bliss was reinterred at the Fort Bliss National Cemetery. While his monument moved to the Fort Bliss Parade Grounds, the original panels were removed and duplicated before its dedication on April 22, 1956. The original panels were stored outside on wooden pallets before the CRMT acquired them to move into a more stable environment.




A digitization station used for photographing special collections. A properly digitized collection improves access, preserves the original material, and provides new options for research. About 75% of the collection has been completed.


 Because of the extensive, varied artifact and archival collection, the Fort Bliss Curatorial staff receive multiple requests for access to specific items to complete analysis associated with dissertations (most recent a Ph. D. candidate from University of New Mexico, Albuquerque). The Arizona State Museum recently requested artifacts for

comparative analysis. And, as part of an Assistance Agreement with BLM-Carlsbad Field Office, Office of Contract Archaeology, requested specific organic artifacts.

Archaeological Resources


Site Monitoring

 As part of a “camera loaner program” sponsored by the U.S. Army Corp of Engineers Research and Development Center’s Construction Engineering Research Laboratory, the Fort Bliss Natural Resources department was provided about 50 trail cameras. Thousands of photographs from the trail cameras are processed each year. Photographs are reviewed for trespassing, varied animal species counts, and other captured anomalies. Photos capturing trespassing are sent to the Directorate of Emergency Services (DES) to increase security with the DES Game Warden.


 Numerous trail cameras also monitor trespassing at historic properties and have resulted in new and increased security measures to protect cultural resources.



Mission Support


 To proactively meet the needs of the installation’s mission, the Fort Bliss CRMP continues to utilize Multiple Award Task Order Contract (MATOCs) and Single Award Task Order Contracts (SATOC). The MATOC allows for the completion of large-scale inventories and evaluations, multiple site mitigations, continued digitization and rehabilitation of collections and documents. The MATOC is awarded to a fully staffed contractor for rapid deployment of cultural resources work. The SATOC allows for in-house support to expedite small-scale inventories and evaluations required to complete Environmental Assessments.





 The TRU methodology allows for more accurate and consistent recording of large-scale and small inventories and evaluations.


The GIS database created by the contractors is seamlessly incorporated into the Fort Bliss CRMP archaeological database. This information provides the most accurate locations of all known archaeological sites, which is useful when reviewing locations for proposed military training/activities.

The CRMT works to further assist units when required to support training in remote locations and night training activities. They further assist units in meeting regulatory compliance and environmental awareness training.

 Each fiscal year, the Fort Bliss CRMT consults with ITAM to prioritize inventory, evaluation, and mitigation of cultural resources. This proactive process allows the installation’s mission to continue without significant delays.

 Partial or complete mitigation of at least five historic properties during FY22 are nearing completion. These sites have generated thousands of artifacts and identified more than 12 pithouse structures below the ground surface. Occupation periods range between Late Archaic and Formative periods (A.D. 200 to 1450). These structures have the potential to change how we identify pithouses from surface remains.


 Traditionally, a 2-meter diameter carbon stain indicated the remains of a structure. Recent investigations have identified structures based on the subtle coloration changes of the soils. In addition, one of the projects encountered the deflated remains of a small pueblo. For FY24, at least six sites have been identified for complete or partial mitigation. Select corridors for at least three (3) sites will be mitigated to allow ITAM to complete their routine maintenance without negatively impacting cultural resources. Two large prehistoric sites are proposed for FY25.






Fabiola Silva – Archaeologist performing field survey. This survey was required for the completion of an Environmental Assessment. The project was for a potential land transfer to the BLM.

Partnerships

 Tour of the Fort Bliss Curatorial Facility were provided to 12 staff members of the Centennial Museum (June 2023). Another was provided to visiting members of the newly created Castner Range National Monument in early July 2023, which later prompted a tour for IMCOM HQ budget personnel and new DPW Director.

Cultural Resources Awareness and Education

 The CRMT is embarking on an improved public relations campaign by partnering with the Fort Bliss Directorate of Morale, Welfare, and Recreation (MWR). The first event is Volksmarch in September 2023 as part of MWR’s Oktoberfest celebrations. This event will highlight the history of Fort Bliss and the contributions of CPT George Ruhlen and Mr. Frederick Arnold Gartner, both German immigrants who designed and oversaw the construction of present-day Fort Bliss in 1891.

 The CRMT Architectural Historian will lead guided tours through the Fort Bliss Main Post Historic District during the Fort Bliss Armed Forces Day Parade in May 2024. Efforts include bringing the 1st Cavalry Division Horse Detachment to display the detachment’s commitment to preserving and maintaining the standards and traditions of the U.S. Cavalry during the 19th century.



This will return the intangible heritage of the U.S. Cavalry to the birthplace of the 1st Cavalry Division for Soldiers, Families, and Civilians to experience and enjoy.



The El Paso Museum of Archaeology requested whole ceramic vessels for a 2022 exhibit. Fort Bliss was acknowledged as a co-sponsor and contributor to the narrative of the exhibit. In May 2023, a list of artifacts



associated with Castner Range National Monument was sent to the El Paso Museum of Archaeology. An upcoming exhibit detailing the prehistory and history of Castner Range will include artifacts on loan from Fort Bliss.



Earth Science Day at the University of Texas at El Paso (UTEP). The outreach event in partnership with UTEP highlights the environmental work at Fort Bliss. Martha Yduarte – Archaeologist, in background.



The Fort Bliss CRMT continues to foster a collaborative relationship with co-land managers, BLM-Las Cruces District Office (BLM-LCDO). In August of 2022, an Inter-



Agency team consisted of the BLM-LCDO paleontologist, the Organ Mountains-Desert Peaks National Monument and Prehistoric Trackways National Monument archaeologist, and the Fort Bliss CRMT, Natural Resources personnel, and in-house contractors. Conklin’s Cave was excavated in 1929 and yielded a variety of late Pleistocene animal remains (i.e., giant sloth, Dire Wolf, two plastrons of large turtles). Although there was no evidence of vandalism, it was highly recommended that trail cameras be installed. The visit identified several prehistoric artifacts (biface and several lithic flakes). The BLM-LCDO

paleontologist noted an extinct camel tooth on the talus slope.

Native American Outreach

U.S. Army Garrison Fort Bliss is required by the Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. §3001 *et. seq.*, and the implementing regulation, 43 CFR Part 10, to follow a process for the disposition of culturally unidentifiable Native American human remains within their archaeological collections. Final disposition is determined through consultation with Indian tribes (§10.11). The Mandatory Center of Expertise for the Curation and Management of Archaeological Collections has been engaged to assist Fort Bliss in completing cultural affiliation and aboriginal occupancy research for their NAGPRA culturally unidentifiable human remains and funerary objects.



While working on the Presidential Proclamation for Castner Range National Monument, the CRMT was commended by the Deputy Assistant Secretary of the Army. During consultation between the Council on Environmental Quality (CEQ) and the local tribes, good feedback was received and “specifically mentioned appreciation for Fort Bliss and the positive relationship.” The CEQ stated “this type of positive feedback is unusual in their engagements.”



Conclusion

Fort Bliss CRMP continues to be at the forefront of innovative methodologies, research, curatorial, and creative mitigation techniques. The CRMP continues to prove that good management, communication, as well as partnerships are the key to successfully meeting the installation’s mission needs while preserving cultural heritage.