

Challenge

How can Fort Carson protect significant cultural resources while maintaining the largest possible area for military training? How can Fort Carson maintain sensitivity to all cultures with traditional ties to lands currently used by the Installation while continuing its use of the land for military training purposes?

Key Considerations

- **Mission Activities** – Activities in close proximity to cultural sites must not disturb or destroy the site.
- **Preservation** – Fort Carson’s cultural resources program is designed to maintain the integrity of all cultural sites and artifacts.
- **Identification** – The program actively seeks to identify and preserve any new cultural sites located in the course of mission or support activities.
- **Education** – It is critical that people working at Fort Carson be able to identify and understand the importance of all sites.

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Importance to Fort Carson

Mission – Training activities are restricted by the presence of valuable cultural sites at Fort Carson.

Training must be conducted in such a manner that protects these cultural resources.

Quality of Life – Preserving evidence of past cultures and history is an important part of our modern culture. Appreciation of past cultures enriches the lives of soldiers, their families, and members of the surrounding community.

Costs

- The estimated costs for Fort Carson’s cultural preservation program for 2003:
 - Survey over 5,000 Acres: \$430,000
 - Conduct Phase 2 Evaluations: \$373,000
 - Mitigate Six Archeological Properties: \$650,000
 - Evaluate Early Cold War Era Structures: \$60,000
 - Develop Restoration Plans for World War II Hospital Complex: \$66,000
 - Finalize Agreement for Turkey Creek Ranch: \$75,000
 - Site Protection Efforts: \$50,000
 - Identify Traditional Cultural Properties: \$54,000
 - Manage Collections and Operate Curation Facility: \$5,000
 - Expand the Curation Facility: \$450,000
 - Re-evaluate Eligible Sites and Develop Mitigation/Management Plan: \$300,000

- Consult with Native American Tribes: \$45,000
- **Total: \$2,504,000**

Environment and the Community – Fort Carson takes very good care of cultural resources

located on the land on which it trains soldiers. Training programs include information concerning

signage and other indicators of sensitive sites, and soldiers strive to follow these rules.

Because

cultural resources on Fort Carson and Piñon Canyon Maneuver Sites have been left undisturbed,

analysis of these sites is possible. When sites are disturbed, the objects may be pulled out of place,

rendering many areas scientifically unsuitable for study.

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Introduction

The 375,000 acres of land managed by the Cultural Resources Program for the Fort Carson Military

Reservation and the Piñon Canyon Maneuver Site span a range of occupation in North America from

approximately 12,000 years ago to the present. All major prehistoric and historic periods are represented.

Because the cultural resources are nonrenewable, they must be carefully preserved.

Background

Nearly 6,000 cultural resource sites have been identified on Fort Carson and the Piñon Canyon Maneuver

Site (Figure 9.1). From a possible Paleo-Indian mammoth kill site (dated to approximately 11,500 years

ago) to Cold War housing structures, the Installation protects many valuable cultural resources. Maintaining

these resources while supporting the primary training mission is a delicate task, requiring documentation,

protection, education of soldiers and other land users, and coordination with appropriate agencies.

Figure 9.1 – Number and Types of Cultural Resources on Fort Carson and the Piñon Canyon Maneuver Site

Archaeological Sites	1,545	4,071	5,616
Sites Eligible for the National Register of Historic Places	100	761	861
Prehistoric Sites	1,262	2,996	4,258
Historic Sites, 1860s - Present	236	654	8,980
Multi-component Sites (both Prehistoric and Historic Components)			

Cultural resources on Fort Carson and the Piñon Canyon Maneuver Site are divided into four broad groups:

historic architectural buildings, archaeological sites, traditional cultural properties and sacred sites, and paleontological resources. Examples of historic architectural buildings include homestead structures (Figure 9.2), the World War II hospital complex, and Cold War family housing. Archaeological sites are those that are finite and bounded, such as a rock art site. Traditional cultural properties and sacred sites are areas with religious or ceremonial significance identified by a Native American tribe. Paleontological resources consist of dinosaur tracks and fossils of other plant and animal life.

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Figure 9.2 – Moses B. Stevens Homestead

All artifacts collected are inventoried and permanently stored at Fort Carson's state-of-the-art curation facility. The facility meets or exceeds all criteria for federally owned archeological collections; Fort Carson has made the design available to other federal installations. The current facility is close to maximum capacity, but the building was designed to be expanded in order to provide adequate storage space for many years to come.

Activities and Impacts

Activities and impacts associated with cultural resources involve protection and documentation (Figure 9.3). When an activity is planned for Fort Carson or the Piñon Canyon Maneuver Site in a location that has not been surveyed for cultural resources, the area must be examined first. If cultural resources are found, the process of identification, evaluation, and documentation ensues. Activities that can affect cultural resources include training maneuvers, excavation or digging, vegetation removal, and construction. Unplanned and undesirable activities that can affect cultural resources include vandalism and erosion. Preservation and mitigation options include avoidance (resiting of the military project/activity), protection (fencing or signage), and data recovery (excavation and documentation).

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Figure 9.3 – Cultural Resources Activities Flow at Fort Carson*

* Consultation with the Colorado State Historic Preservation Office is mandatory for all stages of

cultural resources
management.

Cultural Resources at Fort Carson and the Piñon Canyon Maneuver Site

Both Fort Carson and the Piñon Canyon Maneuver Site have all four types of cultural resources: historic architectural buildings, archaeological sites, traditional cultural properties/sacred sites, and paleontological resources. The Directorate of Environmental Compliance and Management manages all these resources.

Education and training are extremely important for cultural resources management to mitigate unnecessary damage and to help sustain these valuable resources. Soldiers need to be made aware of the potential for the loss of valuable data if cultural resources are damaged or disturbed, and the ensuing negative public opinion.

Soldiers receive cultural resource education during normal training as part of an environmental protection course and through Standard Operating Procedures. Classroom training is geared to inform soldiers of policies and regulations. Some cultural sites are delineated with flags, fences, and signage, which are recognizable to soldiers during maneuvers.

Historical Architectural Buildings

Sites with architectural features are susceptible to weathering. Both Fort Carson and the Piñon Canyon Maneuver Site bear the remains of human habitation ranging from subterranean structures dating back 1,500 years to settlers' homes built in the 1930s. Due to settlement patterns in Colorado, newer buildings of architectural significance are found at Fort Carson, but older structures and remains may be found at both locations.

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The Piñon Canyon Maneuver Site provides a historic record of the region with remnants of prehistoric, Native American, Hispanic, and Euro-American settlements. Historians and archaeologists use the artifacts, ruins, and remains associated with the architectural finds of the region to understand how people lived.

Learning how past cultures used their environment to make the best of harsh conditions may be of use when developing sustainability projects. An understanding of local building materials, patterns of settlement, and home types may assist with energy conservation and use of natural resources. Fort Carson's architectural sites provide information concerning early settlers and

western expansion, while more recent structures provide insights into twentieth century society. During World War II, Fort Carson's hospital complex was the largest of nine such complexes built in the nation specifically for the care and rehabilitation of wounded soldiers. With 2,000 beds and 11 square miles of floor space, the hospital became a major training center for nurses in 1943. Several of the hospital buildings are used for administrative activities at the Installation. Other World War II architectural sites include a warehouse district and sewage treatment plant. Cold War housing at Fort Carson provides a history of contracting, Army policy, and neighborhood design of the 1950s. World War II and Cold War structures are currently being studied for historical significance and eventual disposition or long-term protection.

Traditional Cultural Properties and Sacred Sites

Fort Carson has made efforts to understand areas of significance to the 11 Native American Tribes with current ties to Fort Carson and the Piñon Canyon Maneuver Site. Newspaper article reviews and oral history interviews were done to locate sites and understand their history. In 2002, the Installation plans to initiate a program to extend oral history investigations so that additional cultural sites may be identified and managed.

Archaeological Sites

An archaeological site is a finite, bounded region of cultural activity, such as a rock art site. There are 27 rock art sites at Fort Carson and 126 at the Piñon Canyon Maneuver Site. Figure 9.4 provides a good example of rock art found in the area. Certain areas at the Piñon Canyon Maneuver Site contain high concentrations of rock art that need to be evaluated and documented further. Rock art can indicate past lifestyles and animals formerly hunted in the area. Because of the Army's stewardship and protection practices, some archaeological sites remain undisturbed, allowing for proper, in-context evaluation.

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Figure 9.4 – The Korgel Deer Petroglyph

Paleontological Resources

While not considered a cultural resource, and not yet a federally protected resource category, the care and archiving of paleontological resources are similar to that of protected cultural resources. Paleontological

resources are housed at Fort Carson's Curation Facility on a limited scale. Paleontological sites have been located in 53 areas on Fort Carson and 13 areas on the Piñon Canyon Maneuver Site. Fossil types include plants, animals, dinosaurs, fish, and coral.

The Human Perspective

Preserving cultural resources is important for several reasons. Knowledge of the past can assist in making informed decisions for the future. People understand themselves and others based on ethnic identities tied to cultural histories and shared experiences. Artifacts found at Fort Carson and on the Piñon Canyon Maneuver Site assist archaeologists in understanding past human activity. The study of these materials

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serves as a bridge to the past by supporting, complementing, or contradicting previous interpretations.

Archaeological investigations of past societies enable analysis of the transformation of cultures through time.

Using a preservation approach that balances and recognizes the complexity of human interaction, both

physically and temporally, is a vital component of cultural resources management.

Archaeological

investigations and historic context studies are essential to the preservation efforts.

Beyond the Pikes Peak Region

When examining archaeological sites, concern for the artifacts, their position in the ground, and how the

information gathered relates to a global historical context are all taken into consideration.

Linking histories

to show worldwide commonalities may provide an increased sense of community across cultures.

Forecast

For cultural resources, sustainability means protecting the resources. Fort Carson has taken many

administrative and physical measures to ensure the protection of significant cultural resources on its

properties. Management of cultural resources must include holistic approaches in environmental planning,

especially in areas common to other resource management programs. For example, failure to minimize

erosion in culturally sensitive areas could negatively impact not only the resources, but military training

capabilities as well. Resource preservation is inherently a cooperative effort, thus

management practices must be jointly developed and mutually enforced.

Current Sustainability Activities

Oral History Projects – A recent project involved interviewing Native Americans and former ranchers who lived on Fort Carson or the Piñon Canyon Maneuver Site to determine locations of Native American religious/ceremonial sites and other historic sites on the properties. A current oral history project is documenting the settlement patterns and practices of Turkey Creek Canyon on Fort Carson, an area significant to the development of southern Colorado.

Training Videos – Three thirty-minute videos have been developed to demonstrate the value of cultural resources on the Installation and assist soldiers and the public in understanding the cultural heritage of the lands on which they train, work, and play.

Front Range Eco-Regional Cooperative – A cooperative agreement between Department of Defense (DOD) installations analyzes management constraints and concerns by sharing manpower, equipment, information, and contracts to enhance missions and reduce costs for issues concerning cultural resources, among others.

Curation Facility – The Installation built a state-of-the-art building for archiving and conserving its extensive collection of cultural resources. Designs were made available to other installations to reduce their costs.

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Cooperative Agreements and Interservice Support Agreements – Currently, Fort Carson has operational agreements with the Colorado State Historic Preservation Officer, the Advisory Council on Historic Preservation, the National Park Service, the U.S. Army Corps of Engineers, New Mexico State University, and Fort Lewis College.

The Integrated Cultural Resources Management Plan (ICRMP) – A five-year integrated plan has been developed to provide guidance and outline procedures that will enable Fort Carson to identify, evaluate, and protect cultural resources.

Environmental Protection Officer Program – This program, which is geared to Army unit and activity representatives, outlines cultural resource management concerns to ensure the continued

protection of the resources and enhancement of training activities.

Geographic Information System (GIS) – The Cultural Resources Management Program’s GIS platform

complements current predictive modeling techniques used to identify areas of high probability for cultural resources. Use of the system helps to protect cultural resources and reduces restrictions on training lands, while facilitating the overall army management process by integrating available information into training mission development.

The Realm of Possibility

To become sustainable, Fort Carson is encouraged to identify and plan for innovations that will support the goals established during the Installation Sustainability Workshop. To do this, participants should be exposed to the concepts and technologies that are within the realm of possibility now and in the future. This section provides a glimpse of what can be accomplished with existing technology and what can be expected from developing sustainability approaches.

- **Geophysical Techniques** – The U.S. Army Construction Engineering Research Laboratory is conducting tests using geophysical techniques to make determinations on materials commonly buried at archaeological sites. Location, depth, dimensions, and position of historical objects are recorded and mapped using geophysical techniques and equipment. See <http://www.cecer.army.mil/td/tips/product/details.cfm?ID=424>.
- **Historic Preservation** – Historic preservation of buildings and sustainable design have complemented each other in many places. Window replacement, paint, and replacement of heating, ventilation, and air conditioning systems may allow for the incorporation of sustainable principles. For an example and more information, see <http://www.saptek.com/sp/general/21-2-4.pdf>.
- **Modeling Probability of Cultural Sites** – To guide archaeological investigations, the Center for Ecological Management of Military Lands (CEMML) at Colorado State University has developed a GISbased model to identify areas of high, high-medium, medium, low-medium, and low probability for archaeological sites. Using remote sensing equipment, aerial photography technology, and modeling increases the likelihood of releasing and expanding land for military use (<http://www.cemml.colostate.edu>).

Fort Carson 25-Year Goals for Cultural Resources

To be determined by Fort Carson Command and staff, as advised by members of the local and regulatory communities, at the Installation Sustainability Workshop on 4-6 September 2002.