Finding of No Significant Impact:
Construction of an Ammunition Holding Area (AHA), Fort Carson, Colorado
July 2021

Introduction

An Ammunition Holding Area (AHA) provides a safe and secure temporary storage for ammunition and explosives used to support live fire weapons sustainment training and Soldier and crew qualification. Currently, when units draw their ammunition and explosives from the Ammunition Supply Point (ASP) in advance of training exercises, space in the current AHA is quite often not available for storage of all or a portion of the training load. If there is insufficient space, the unit needs to establish a temporary open storage site down range. It is difficult to meet all of the respective safety and storage requirements in temporary open storage areas down range especially during inclement weather.

The current AHA will continue to be in operation. A new AHA would provide an additional securable location to store ammunition and explosives in preparation for a training event and to prepare materials for return to the ASP.

Description of the Proposed Action

Fort Carson is proposing to construct an AHA with 22 to 24 ammunition storage bays in Training Area (TA) 10. Any fill excavation on Fort Carson for this project will not occur within protected resource areas, such as wetlands, stream buffers, and cultural resources. The areas disturbed by the excavation will be remediated and re-vegetated after excavation is complete. Reseeding must only be conducted with Fort Carson approved methods and seed mixes. There would be a guard building, vault latrine, security lighting, lightning protection, and security fencing around the facility. The required electrical service for lighting and security will need about 6,100 linear feet of buried power line coming from a location northwest of the site. Water for firefighting is available from the nearby reservoirs such as Haynes, Townsend and Womack. Access will be gained by existing native surface roads off of Main Supply Route (MSR) 4 and along an existing secondary travel way that already runs to the site.

No Action Alternative

The No Action Alternative means that the current AHA would remain in use and no additional AHA facilities would be constructed. The No Action Alternative means that there would continue to be insufficient temporary ammunition storage space for training events at Fort Carson.

Alternatives

There were two alternatives considered but dismissed from further analysis. The first was a site in TA16 was considered for the new AHA but was eliminated because the area of risk overlapped with highly used areas downrange. The second was an expansion of the current AHA which is not plausible because of overlapping with

inhabited buildings and public transportation routes. There are also wetland features near the existing AHA that make expansion difficult while meeting the INRMP goal of zero loss of wetlands on Fort Carson.

Public Review

The draft environmental assessment (EA) and Finding of No Significant Impact (FNSI) were available for public comment from June 9, 2021 through July 9, 2021. A Notice of Availability (NOA) was announced in local media, and the documents made available online at: https://www.carson.army.mil/organizations/dpw.html#three. One comment was received from the Northern Cheyenne Tribe during the comment period. The commenter noted that there were no concerns regarding the project.

Summary of the Environmental Consequences

No significant impacts are anticipated as a result of implementing the Proposed Action. The potential impacts have been broken down into four categories: beneficial, none (or no impacts), negligible, minor, moderate but less than significant, or significant. These are summarized in Section 3.1 of the EA. There were several resource areas that were dismissed from detailed analysis. These included noise, traffic, socio-economics, airspace, facilities, utilities, and hazardous materials.

Maneuver training and access by the public will no longer be available in the area of risk when the AHA is in use. This will mitigate any risk to Soldiers and the public from the AHA. This results in a loss of about 250 acres or 0.27 percent of Fort Carson's training land. This effect is minor. The construction and use of the AHA will generate fugitive dust which will be reduced to a minor effect through the Fort Carson Fugitive Dust Plan. There will be a loss of about 40 acres of marginal quality wildlife habitat. This effect is minor when considered over the entire Installation. There will be an increased risk of the spread of invasive plant species that will remain minor using best management practices to avoid the introduction and spread of weeds.

The soil erosion from the site during construction and as a result of the increased impervious surfaces will be minor because of the use of best management practices during construction. There will be no effect to the Waters of the United States or floodplains. The proposed action is being planned and will be constructed according the Explosives Sites Plan per Army Pamphlet 385-65 (Explosive Site Plan Development and Submission) and there will be no effect to health or safety as a result of the construction of the AHA.

There are no historic properties within the proposed limit of disturbance and there will be no effect to the viewshed of any adjacent historic sites. The Proposed Action is not considered an exempted undertaking under the Fort Carson Downrange PA; therefore, additional Section 106 consultation is required. In accordance with Section 106 of the NHPA, the USAG Fort Carson has determined "no historic properties affected". NHPA Section 106 consultation was completed in July 2021. The SHPO concurred with the finding of "no historic properties affected' via correspondence dated 3 June 2021 (HC

#79810). Response were also received from the Comanche Nation of Oklahoma and Pawnee Nation of Oklahoma.

Mitigation Measures

There are no mitigation measures recommended for the Proposed Action. USAG Fort Carson would continue to adhere to legal and regulatory requirements, and continue to use adaptive management in implementing approved management plans, SOPs, and BMPs related to cultural resources.

Best management practices include implementing the *Title V Operating Permit and Fugitive Dust Control Plan.* Material borrowing will avoid areas with active prairie dog colonies to minimize effects to the borrowing owl, which is a state listed species. The construction project would adhere to the Migratory Bird Treaty Act requirements, which includes the avoidance of construction-related disturbance impacts to migratory bird nesting areas, where possible.

USAG Fort Carson would comply with Section 438 of the Energy Independence Security Act. This requires low-impact development practices that can be found in the USAG Fort Carson *Best Management Practices Operation and Maintenance Plan for Stormwater Management Structures.* Construction projects need to obtain a National Pollution Discharge Elimination System (NPDES) General Construction General Permit and prepare a Stormwater Pollution Prevention Plan (SWPPP). Application of existing land management programs, including training land rotations, limited-use areas, dismounted-only areas, off-limit areas, and Land Rehabilitation and Maintenance efforts, including maintaining erosion control structures, are employed to offset the effects of training on water quality.

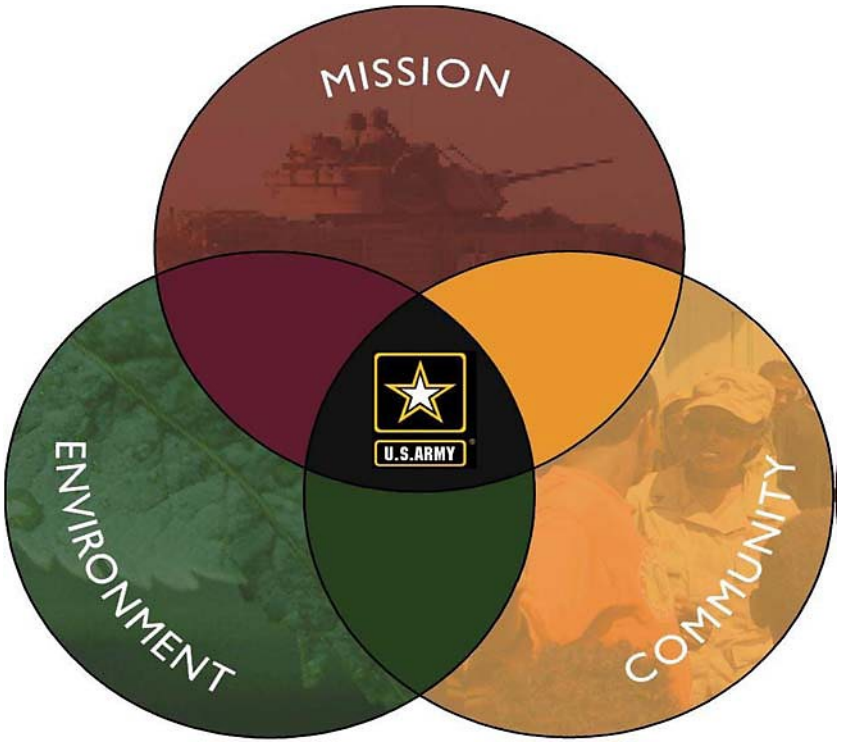
Conclusion and Findings

Based on careful review of the EA, I have determined that no significant direct, indirect, or cumulative impacts to the human or natural environment are anticipated because of the implementation of the Proposed Action. The Proposed Action is not a major federal action that would significantly affect the quality of the environment within the meaning of Section 102(2)(c) of NEPA; and an environmental impact statement is not required, and will not be prepared. My decision is based on the potential environmental and socio-economic impacts associated with the Proposed Action as is analyzed in the EA. This decision complies with legal requirements and will take into account all submitted information regarding reasonable alternatives and environmental impacts.

Date: 21 July 21

NATHAN R. SPRINGER
COL, AR
Garrison Commander
Fort Carson, Colorado

Environmental Assessment for the
Construction of an Ammunition Holding Area (AHA) at Fort Carson, CO
July 2021



Fort Carson

Directorate of Public Works, Environmental Division

Environmental Assessment
Construction of an Ammunition Holding Area at Fort Carson, CO

July 2021

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21 July 21
Date

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1 Purpose and Proposed Action

1.1 Fort Carson

Fort Carson is a U.S. Army installation located primarily in El Paso County, Colorado, near the city of Colorado Springs. Established in 1942 and named after General "Kit" Carson, Fort Carson is home to:

- 4th Infantry Division
- 10th Special Forces Group
- 440th Civil Affairs Battalion U.S. Army Reserve
- 71st Ordnance Group
- 4th Engineer Battalion
- 759th Military Police Battalion
- 10th Combat Support Hospital, MEDDAC, and U.S. Army Dental Activity
- 4th Sustainment Brigade
- 4th Security Force and Assistance Brigade
- Army Field Support Battalion-Fort Carson
- 13th Air Support Operations Squadron of the U.S. Air Force.

The post also hosts additional units of the Army Reserve, Navy Reserve, and the Colorado ARNG (COARNG).

The U.S. Army Garrison (USAG) Fort Carson is responsible for supporting the living and training requirements of Army troops stationed at the installation. Fort Carson's downrange area is used for weapons qualification and field training. The downrange area comprises the land area outside the cantonment (main post) area, including firing ranges, Training Areas, and impact areas. The approximately 137,000-acre (55,000 ha) installation extends southward from El Paso County into Pueblo and Fremont Counties.

Fort Carson also manages the training maneuver site, Piñon Canyon Maneuver Site (PCMS), primarily used to support maneuver training for units stationed at Fort Carson when large contiguous maneuver and TAs are required. PCMS covers approximately 235,000 acres (95,101 ha), which includes a cantonment area of approximately 1,660 acres (672 ha).

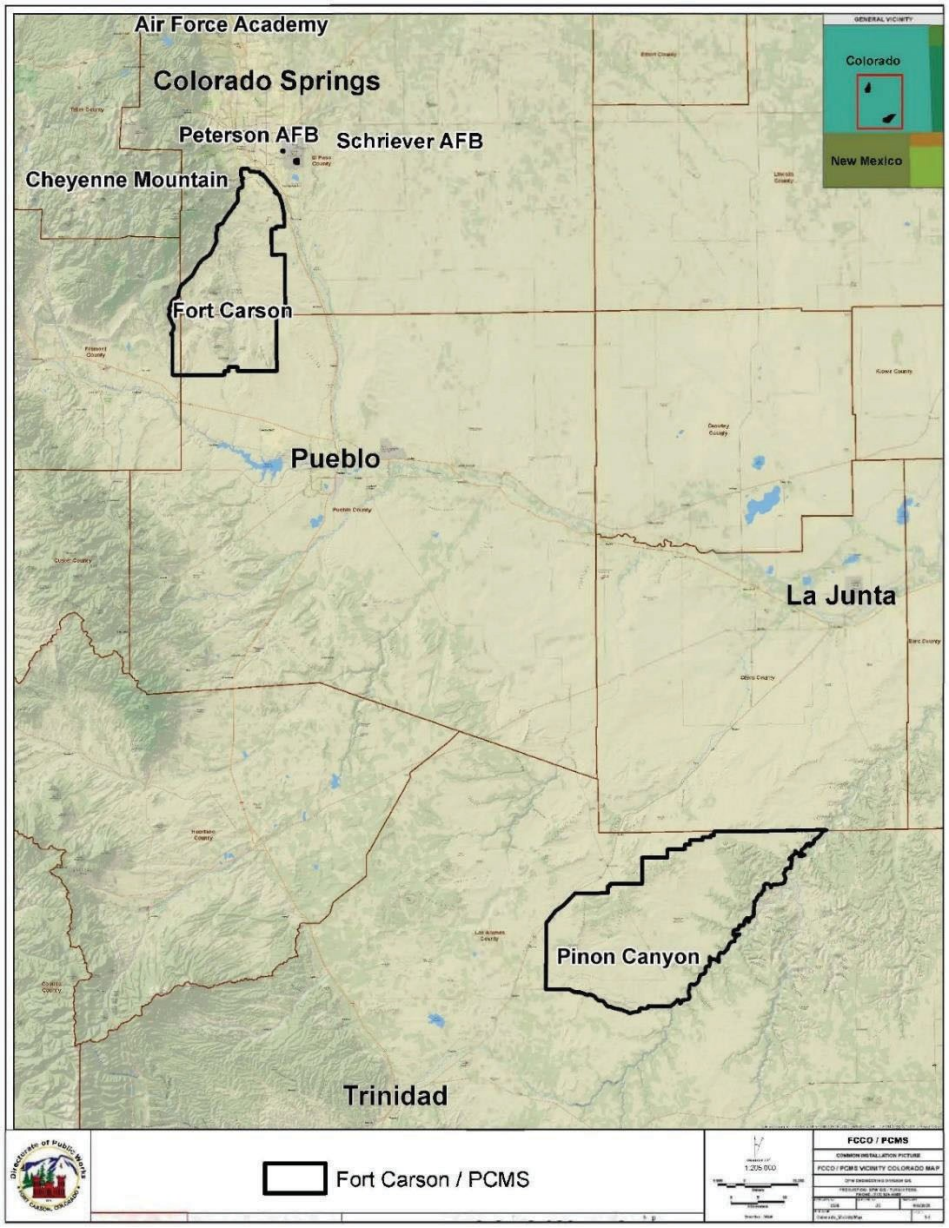

Figure 1: Vicinity Map for Fort Carson and PCMS, Colorado.

1.2 Purpose and Need

An Ammunition Holding Area (AHA) provides a safe and secure temporary storage for ammunition and explosives used to support live fire weapons sustainment training and Soldier and crew qualification. The existing AHA has six ammunition storage bays with associated support buildings (guard post and other outbuildings) and can only hold about 5% of the ammunition required for a gunnery qualification event. The recent conversion of the Infantry Brigade Combat Team (BCT) to a Stryker BCT has

exacerbated the shortage of secure temporary ammunition and explosives holding requirements.

Currently, when units draw their ammunition and explosives from the Ammunition Supply Point (ASP) in advance of training exercises, space in the current AHA is quite often not available for storage of all or a portion of the training load. If there is insufficient space, the unit needs to establish a temporary open storage site down range. This temporary site holding site may also be required for several days after a training event concludes to allow for the re-packaging of any unused ammunition and explosives for return to the ASP. During temporary storage outside the AHA, ammunition and explosives require additional security resources and safety protocols compared to storage in an AHA. There are additional difficulties to meet all of the respective safety and storage requirements in temporary open storage areas down range, especially during inclement weather.

The existing AHA will remain in operation. A new AHA would provide an additional securable location to store ammunition and explosives in preparation for a training event and to prepare materials for return to the ASP.

1.3 Scope of Analysis

This Environmental Assessment (EA) has been developed in accordance with the National Environmental Policy Act (NEPA), regulations issued by the Council on Environmental Quality (CEQ) published in 40 Code of Federal Regulations (CFR) Parts 1500-1508, and the Army's NEPA-implementing procedures published in 32 CFR Part 651, *Environmental Analysis of Army Actions (Army Regulation 200-2)*.

The CEQ NEPA regulations were updated on July 16, 2020. According to the August 26, 2020 memorandum from the Assistant Secretary of the Army Installations, Energy and Environment, Army NEPA compliance actions initiated after September 14, 2020 must meet any and all new requirements of the updated CEQ regulations in addition to the current requirements in the Army's NEPA regulations. Where 40 CFR 1500-1508 establishes new requirements or creates inconsistencies with the Army's NEPA regulations, 40 CFR 1500-1508 takes precedence and must be followed in those instances.

This EA facilitates the planning and decision-making by the Garrison Commander. It helps the Army, stakeholders, and the public understand the potential extent of environmental impacts of the Proposed Action and alternatives, and whether the effects are significant.

1.4 Public Involvement

The draft environmental assessment (EA) and Finding of No Significant Impact (FNSI) were available for public comment from June 9, 2021 through July 9, 2021. A Notice of Availability (NOA) was announced in local media, and the documents made available

online at: https://www.carson.army.mil/organizations/dpw.html#three. One comment was received from the Northern Cheyenne Tribe during the comment period. The commenter noted that there were no concerns regarding the project.

1.5 Agency and Tribal Consultation

In accordance with 32 CFR 651.36 with regard to the involvement of other agencies and organizations, USAG Fort Carson has provided a copy of these documents to appropriate local, state, and federal government agencies and Native American tribes for their review and comment. More information concerning other ongoing government agency and tribal consultation is set forth throughout this document.

1.6 Decision to be Made

A decision will be made on whether the Proposed Action will have significant impacts. As part of the decision-making process, the Garrison Commander will consider all relevant environmental information and stakeholder and public issues of concern raised as part of the NEPA process. If the process results in a FNSI, the Garrison Commander will document his or her decision on which alternative to implement, which would be signed no earlier than 30 days from the publication of the NOA of the Final EA/Draft FNSI (see Section 1.4 above for information on the NOA publications). Upon a determination that there are no significant impacts, the Army would sign the FNSI and carry out the decision.

2 Proposed Action, No Action Alternative, and Alternative Screening Criteria

2.1 Proposed Action

2.1.1 Construction of Facility

Fort Carson is proposing to construct an AHA with 22 to 24 ammunition storage bays in Training Area (TA) 10. Each bay would be about 105 feet wide and 60 feet deep. The bays will have four (4) parking pads, lightning protection, a vehicle grounding system and protective earthen berms (Figure 3). The parking pads would be either gravel surfaced or concrete, subject to funding resources. The site needed will be about 45 acres and would include travel ways between the rows of storage bays, which may be as wide as 30 feet. Each bay will be surrounded on three (3) sides with 14 foot tall berms to mitigate the risk from any accidental ignition of munitions being stored on the site. The berms between bays will be about 60 feet wide at their base (Figure 4).

The berms will be constructed in one of three ways: 1) balancing materials on site (no fill import needed), 2) fill excavated from a nearby source on post, or 3) fill imported from an off-post site. It will likely be a combination of these three options and will be at

the designer's discretion, unless otherwise required/mitigated for environmental, training or real property reasons.

Any fill excavation on Fort Carson for this project will not occur within protected resource areas, such as wetlands, stream buffers, and cultural resources. The areas disturbed by the excavation will be remediated and re-vegetated after excavation is complete. Reseeding must only be conducted with Fort Carson approved methods and seed mixes.

If on-site borrowing is proposed, once the precise locations of the borrow sites are identified, and before earth moving operations are commenced, borrow site operations will be reviewed to determine if conditions warrant supplemental NEPA documentation as required by 32 CFR 651.5(g) and 40 CFR 1502.9(d). If the review indicates no need for a supplemental analysis, that determination will be documented in a Record of Environmental Consideration (REC). Otherwise, supplemental or independent NEPA analysis will be conducted and documented with the appropriate level of review.

There will be a guard building, vault latrine, security lighting, lightning protection, and security fencing around the facility.

AHA operations require electricity for lighting and security. The electrical service will be provided through buried power lines from the nearest transformer, which is about 6,100 linear feet to the north (orange line in Figure 2). The lines will be buried within the site, between bays and rows of bays. Water for firefighting is available from the nearby reservoirs such as Haynes, Townsend and Womack. Access will be gained by existing native surface roads off of Main Supply Route (MSR) 4 and along an existing secondary travel way that already runs to the site.

No construction will occur in floodplains of Waters of the United States (WOTUS).

2.1.2 Maintenance and Operations of Facility

Short-term storage of ammunition and explosives will occur on a regular basis and will include the use of material handling equipment, such as forklifts and hand jacks. Vegetation within the site will be managed and include mowing and herbicide use for non-native invasive plant species in accordance with the Integrated Pest Management Plan. A 50-foot fire break will be constructed and maintained and include the removal of vegetation and grading of the break to maintain mineral soil. Travel ways will be maintained and include grading and dust suppression. The pit latrine maintenance will include regular emptying and vault inspection.

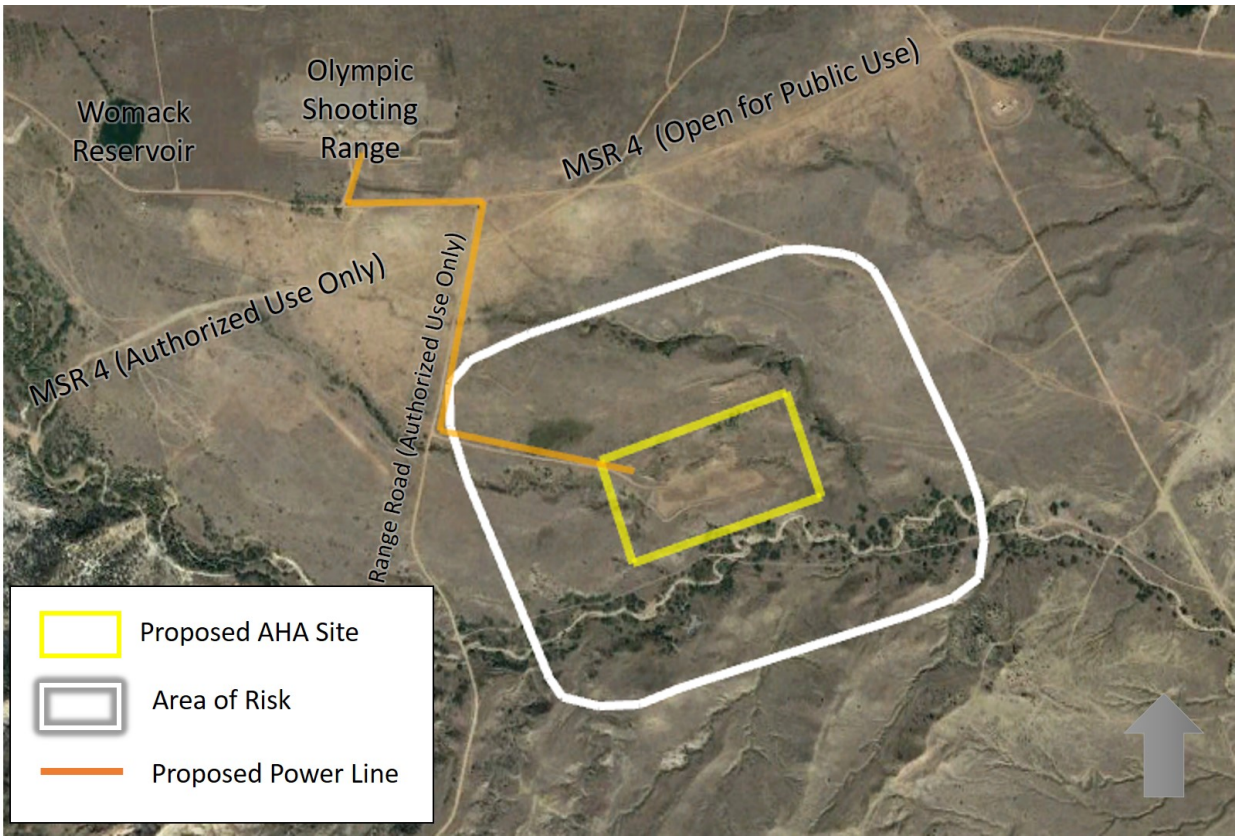

Figure 2: Proposed AHA Site and associated power line construction. Area of Risk is described in Section 4.7 (Health and Safety) of this EA.

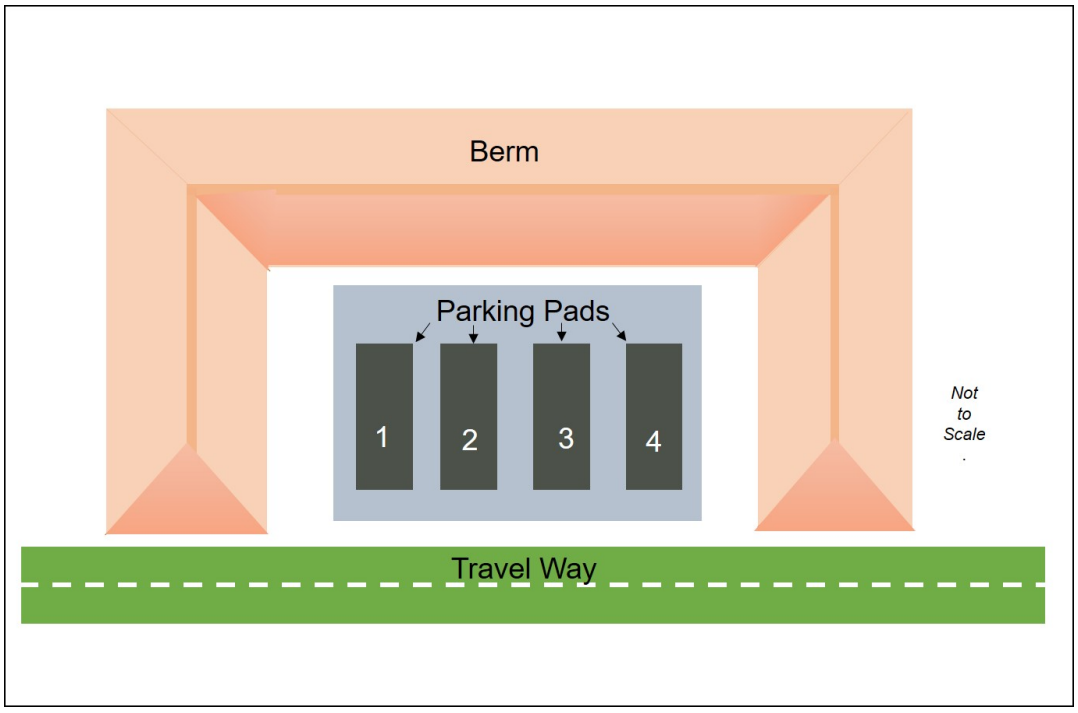

Figure 3: Basic bay configuration for the proposed AHA.

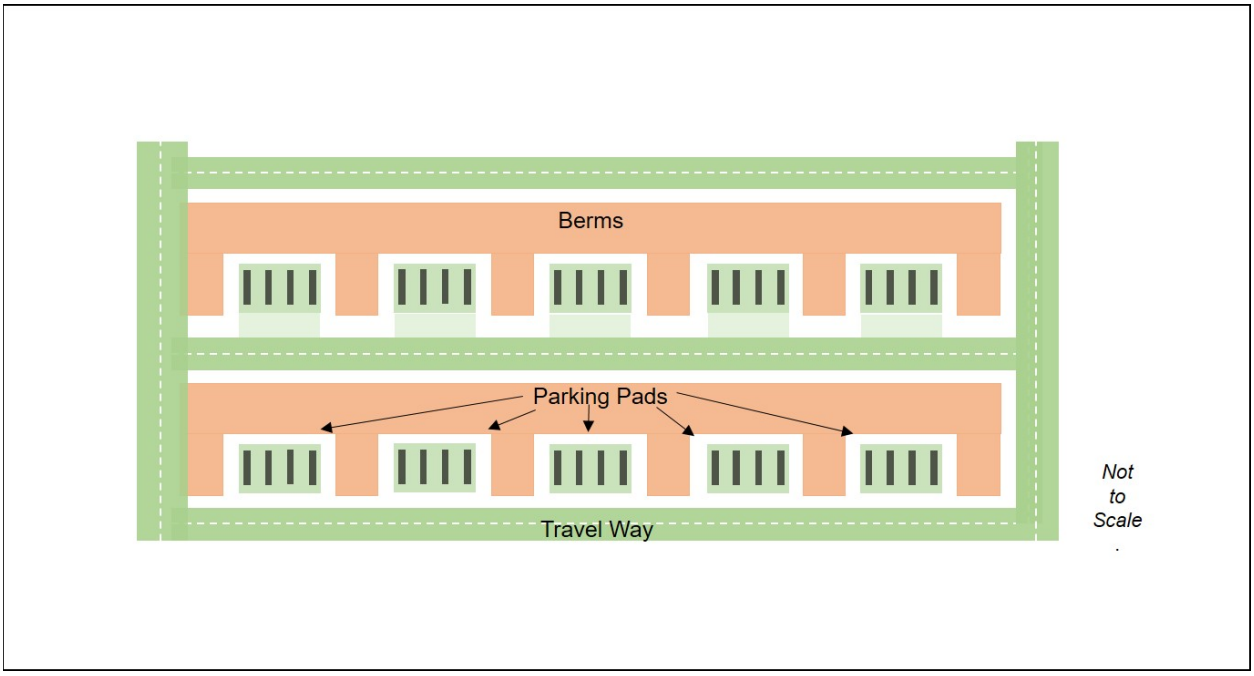

Figure 4: Illustration of how the bays are laid out for a typical AHA.

2.2 No Action Alternative

The No Action Alternative means that the current AHA would remain in use and no additional AHA facilities would be constructed. The No Action Alternative means that there would continue to be insufficient temporary ammunition storage space for training events at Fort Carson.

2.3 Screening Criteria for Alternatives

Screening criteria were used to assess whether an alternative was "reasonable" and would be carried forward for evaluation in this EA. The screening criteria are based upon balancing training requirements with sustainment of the land, maximizing troop readiness, and supporting Soldier and Family quality of life at Fort Carson. The Army established the following screening criteria to identify the range of potential alternatives to meet the purpose and need of the Proposed Alternatives.

2.3.1 Military Construction Planning Considerations

Reasonable alternatives must use minimal construction and renovation given the limited funds available.

2.3.2 Land Use Constraints

Reasonable alternatives must consider:

- Topography (and ability to train);
- Contaminated sites under the management of the Installation Restoration Program;
- Management of 2 depleted uranium (DU) radiation control areas (RCAs)
- Large and Small Impact Areas;
- Off-limits to training/restricted areas;
- Unexploded ordnance; and
- Impacts to existing infrastructure and maneuver lands.

2.3.3 Area of Risk Considerations

The area of risk of an explosive event must not contain inhabited buildings and must meet the requirements for public transportation routes. Alternatives must also not overlap the area of risk with highly used/occupied areas downrange.

2.4 Alternatives Considered but Dismissed from Analysis

Alternative A: TA 16

A site in TA16 was considered for the new AHA, but was eliminated because the area of risk overlapped with highly used areas downrange.

Alternative B: Expansion of the existing AHA

Expansion of the current AHA is not feasible because of overlapping with inhabited buildings and public transportation routes. There are also wetland features near the existing AHA that make expansion difficult while meeting the Integrated Natural Resource management Plan (INRMP) goal of zero loss of wetlands on Fort Carson.

3 Summary of Environmental Consequences and Proposed Mitigations

3.1 Introduction

For analysis, the resources have been categorized to enable a managed and systematic approach; a region of influence is identified for each resource.

The analysis for each resource considers numerous factors when determining impact conclusions. Significance thresholds are defined for each resource to determine whether identified impacts would significantly affect the human environment. The analysis considers whether these effects are reasonably foreseeable and have a reasonably close causal relationship to the Proposed Action or Alternatives. Section 3.2 summarizes the environmental trends and planned projects on Fort Carson. The analysis will consider the effects of the trends and projects that may occur at the same time and place as the Proposed Action or Alternatives. Quantitative and qualitative

analyses have been used to determine if a threshold would be exceeded. Based on the results of these analyses, this EA identifies if a potential impact would be adverse or beneficial and characterizes the severity as one of the following:

- Negligible – An environmental impact could occur but the impact might not be perceptible.
- Minor – A perceptible environmental impact that would clearly not be significant.
- Moderate / Less than Significant – An environmental impact could occur, is readily detectable, but is clearly less than significant. Following standard procedures, best management practices (BMPs), or applying precautionary measures to minimize adverse impacts may be required. Moderate / less than significant adverse impacts would not exceed limits of applicable local, state, or federal regulations.
- Significant but Mitigatable – A significant impact is anticipated, but the Army can implement management actions or other mitigation measures to reduce the adverse impacts to less than significant.
- Significant – An environmental impact which, given the context and intensity, violates or exceeds regulatory or policy standards, would substantially alter the function or character of the resource, or otherwise meet the identified threshold.

Mitigation measures, to include avoidance, BMPs, and standing operating procedures (SOPs), are environmental protection measures that would, per 32 C.F.R. § 651.15(a) definitions, avoid, minimize, rectify, reduce, eliminate, or compensate for the adverse impact of the Proposed Action. Mitigation measures considered, if any, are identified within the environmental consequences section for each resource category and summarized in Section 4.9.

Table 1: Need for analysis by Resource Category.

Resource Elements	Region of Influence	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
Land Use	Land use within and adjacent to Fort Carson	Impacts to land use would be considered significant if the land use were incompatible with existing military land uses and designations (including recreation). These impacts may conflict with Army land use plans, policies, or regulations, or conflict with land use off-post.	No	The construction of an AHA in a training area may affect the amount of maneuver training lands available at Fort Carson. Further analysis can be found in Section 4.1 of this EA.
Air Quality and Greenhouse Gases (GHG)	Air Quality Control Region	An impact to air quality would be considered significant if the Proposed Action were to generate emissions which: • Did not meet Clean Air Act conformity determination requirements to conform with the State Implementation Plan • Substantially increase GHG emissions; or	No	The construction of an AHA could generate fugitive dust. Further analysis can be found in Section 4.2 of this EA.

Resource Elements	Region of Influence	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
		• Contribute to a violation of any federal, state, or local air regulation.		
Noise	Areas adjacent to and within Fort Carson	Impacts would be considered to be significant if noise from the Proposed Action were to cause harm or injury to on-post or off-post communities, or exceed applicable environmental noise limit guidelines	Yes	The noise from construction will not affect sensitive receptors (such as private residences) which are more than one and a half miles away. There would be minimal additional noise created from the operation of the AHA.
Biological Resources	Biological resources within the cantonment, range and maneuver training areas	Impacts to biological resources would be considered significant if: • Substantial permanent conversion or net loss of habitat at the landscape scale, • Long-term loss of impairment of a substantial portion of local habitat, • Loss of population of a species,	No	The construction of an AHA could directly affect wildlife and wildlife habitat at the site. Further analysis can be found in Section 4.3 of this EA.

Resource Elements	Region of Influence	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
		• Unpermitted or unlawful "take" of Endangered Species Act protected species, or species protected under the Bald and Golden Eagle Protection Act or the Migratory Bird Treaty Act		
Water Resources	Watersheds, state-designated stream segments, and groundwater aquifers associated with Fort Carson. U.S. Army Corps of Engineers jurisdictional "waters of the U.S." and wetland resources	Impacts to water quality would be significant if: • Results in an excess sediment load in Fort Carson waters affecting impaired resources, • Results in unpermitted direct effects to waters of the U.S., • Substantially affect surface water drainage or stormwater runoff,	No	The construction of an AHA could increase the risk of sediment delivery to waters of the U.S. or affect wetland habitat. Further analysis can be found in Section 4.4 of this EA.

Resource Elements	Region of Influence	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
		• Substantially affect groundwater quantity or quality, or • Do not comply with policies, regulations and permit related to wetland conservation and protection		
Geology and Soil Resources	Geology and soil resources within the cantonment, range, and maneuver training areas	Impacts on geology, topography, and soil resources would be considered significant if: • The landscape could not be sustained for military training over a wide area, or • Excessive soil losses were to impair vegetation growth	Yes – Geology No- Soils	The geology will not be affected by the construction or operation of the AHA. The construction of an AHA will disturb the soil at the site. Further analysis can be found in Section 4.5 of this EA.
Cultural Resources	Cultural resources within the cantonment, range and	Impacts to cultural resources would be considered significant if they cause direct or indirect alteration of the characteristics that	No	The construction, operation, and maintenance of an AHA could directly impact cultural resources if they are present at the site or within the area at risk and indirectly impact resources within a 3-mile radius of the AHA. Further analysis can be found in Section 4.6 of this EA.

Resource Elements	Region of Influence	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
	maneuver training areas	qualify a property for inclusion in the National Register of Historic Places (NRHP). These may include physical destruction, damage, alteration, removal, changes to or character of the setting, neglect causing deterioration, and transfer, lease or sale. The effects are also considered significant if the Section 106 process is not followed.		
Socio-economics (Includes Health and Safety)	Socio-economic and environmental justice factors within Fort Carson and immediate surrounding communities	Impacts to socio-economics and environmental justice would be considered significant if: • Substantial changes to the sales volume, income, employment or population of Colorado Springs and surrounding area, • Disproportionate adverse	Yes – Socioeconomic and environmental justice No – Health and Safety	There will be no additional personnel employed as a result of the newly constructed AHA and no affect to the local economy. The construction will occur entirely on Fort Carson, and communities with environmental justice concerns will not be adversely affected by the project. There are safety regulations that require the AHA to be constructed so it does not increase risk of harm to health or property for inhabited buildings and public transportation routes. Further analysis can be found in Section 4.7 of this EA.

Resource Elements	Region of Influence	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
		economic, social, or health impacts on communities with environmental justice concerns, such as people of color, low income communities, indigenous communities and overburdened or vulnerable communities, or • Substantially disproportionate health or safety risk to children. • Risk to the health or safety of Soldiers, their Families, or Civilians.		
Traffic and Transportation	Pubic roadways and key access points within and near Fort Carson and roadways within the Installation boundary	Impacts to traffic and transportation would be considered significant if the activities: • Substantially degrade traffic flow during peak hours, or	Yes	Traffic patterns downrange may change slightly as the AHA comes into operation, which may increase military vehicle traffic on the portion of MSR 4 open to the public to access recreation areas such as Haynes, Townsend, and Womack Reservoirs. This may cause an inconvenience, as tactical vehicles are required to maintain a slower speed than non-tactical vehicles. However, the road is wide

Resource Elements	Region of Influence	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
		• Substantially exceed road capacity and design		enough to accommodate two-way traffic, so there is no increased risk of accidents due to the changes in traffic patterns that may occur.
Airspace	Airspace above and surrounding Fort Carson	An impact to airspace would be considered significant if the Proposed Action violated federal Aviation Administration safety regulations or causes a substantial infringement of private or commercial flights	Yes	The power lines servicing the AHA will be buried, so their construction or operation will not require the use of or changes to airspace above or around Fort Carson. The proposed site is about 1.3 miles northeast of an unmanned aircraft system (UAS) complex, which includes a runway. The airspace above the proposed AHA is used by UASs when launching and landing from the runway. The use of the runway or airspace will not be affected, because there are no restrictions on UAS flights over AHA facilities and no conflict regarding the use of airspace.
Facilities, Energy Demand and Generation, and Utilities	Facilities within Fort Carson. Utilities within Fort Carson and in the immediate surrounding communities and counties	Impacts to facilities, energy demand and generation, and utilities would be considered significant if the Proposed Action were to cause an impairment of the utility service to Fort Carson, local communities, homes or businesses.	Yes	The facility will use power for general lighting and heat of the guard building and to light the perimeter of the facility. Power will be run to the facility via a buried line from the closest transformer. The change in energy use will be negligible. There will be no impairment to the utility services.
Hazardous Materials and Hazardous Waste	Fort Carson lands	Impacts from hazardous materials and hazardous waste would be considered significant if substantial additional risk to human	Yes	USAG Fort Carson has a comprehensive program to address the management of hazardous waste, hazardous materials, and toxic substances. The program includes the proper handling and disposal of hazardous waste, as well as appropriate procurement, use, storage, and

Resource Elements	Region of Influence	Threshold of Significance	Dismissed from Further Analysis?	Rational for Analyzing Further or Not
		health or safety would be attributed to the Proposed Action. This includes direct human exposure.		abatement/disposition (if necessary) of hazardous materials, including toxic substances. Several plans are in place to assist with the management of hazardous materials and waste including a Pollution Prevention Plan (also known as the Waste Minimization Plan), Polychlorinated Biphenyl (PCB) Management Plan, Facility Response Plan, Hazardous Waste Management Plan (HWMP), and the Spill Prevention, Control, and Countermeasures Plan (SPCCP). Fort Carson also holds a Resource Conservation and Recovery Act (RCRA) Hazardous Waste Permit.

3.2 Environmental Trends and Planned Projects

The Army is committed to sustaining and preserving the environment at all of its installations. In keeping with that commitment, USAG Fort Carson has an active environmental management program that employs a full array of BMPs and environmental programs to ensure environmental compliance, stewardship, and sustainability. USAG Fort Carson would continue to implement all existing mitigation measures, BMPs, and environmental programs to minimize the impacts the Proposed Action. There are several current and ongoing environmental programs and plans that work to mitigate the effects of managing the built environment and training.

The Integrated Training Area Management Program (ITAM) is an Army-wide program to provide quality, sustainable training environments to support the Army's military mission and help ensure no net loss of training capability (a Sikes Act requirement). ITAM integrates mission requirements derived from the Range and Training Land Program with environmental requirements and environmental management practices.

The Directorate of Public Works (DPW) includes infrastructure maintenance and improvement, to include installation property, buildings and facilities; energy, water and waste programs; oversight of environmental assets to ensure compliance with environmental policies, programs and legislation; management of installation housing programs and facilities; and planning for new construction and improvement to facilities and grounds.

New technologies are proposed for Fort Carson, including improvements in long range missile defense, next generation combat vehicles, future vertical lift, network, air and missile defense, and Soldier lethality. Along with these technologies comes changes in training and personnel. Currently, there is expected to be an increase of almost 300 Soldiers at Fort Carson between 2021 and 2028. Some construction including barracks and administrative buildings will be needed to accommodate these changes as well.

Installation facilities increases and improvements are being planned for, including consolidation of the Space Command units, expansion of MEDDAC facilities, growth of the Colorado Army National Guard training complex on Butts Road, construction of a consolidated virtual Training Aids, Devices, Simulators, and Simulations (TADSS) and construction of a new DLA warehouse. There will be residential improvements, demolition and construction and the relocation of Abrams Elementary School. Gate, road and sidewalk improvements are also anticipated.

Higher intensity and frequency wildfires and flooding events are expected in the area because of climate change effects. There are approximately 30 non-native invasive plant species being managed on the installation, and new infestations are being minimized using BMPs.

El Paso County is growing at a fast rate and will be the size of Denver by 2045. The growth is mainly due to the strong military presence in the area and the new industries coming into the area.

Details of the new technology, stationing actions and future construction are in Appendix A.

4 Affected Environment and Environmental Consequences

4.1 Land Use and Compatibility

4.1.1 Affected Environment

Fort Carson is an active military training facility for both weapons qualifications and field training. Land use falls generally into three broad categories: the Main Post, which consists of developed land and a high density of urban uses; downrange areas, which consists of open land used for training purposes; and land specified for non-training uses, which are designated in various areas and are accessible by the public.

The Main Post area comprises approximately 6,000 acres and contains most of the installation infrastructure, such as Soldier and family housing; administrative, maintenance, community support, recreation, supply, and storage facilities; utilities; and classroom and simulation training facilities. Principal industrial operations include the repair and maintenance of vehicles. These operations mostly occur within the vicinity of the "banana belt" (so called because it is a banana- shaped arc of brick buildings) located along the north and east side of the Main Post area.

The downrange area consists of 56 training areas (approximately 131,000 acres) and Camp Red Devil (1,166 acres). Downrange areas, except for Camp Red Devil, are generally unimproved, meaning it has either no permanent facilities or very limited facilities used by troops to complete training missions. Camp Red Devil consists of several permanent and semi-permanent facilities that support extended duration tactical training on Fort Carson. Portions of the downrange area are restricted from use or are available for limited training to protect natural and cultural resources, fragile soils, recreation areas, or other environmental concerns.

There is a deficit in maneuver area despite the 92,131 acres of maneuverable land at Fort Carson. Fort Carson possesses the doctrinally required contiguous maneuver area to support 2 Battalions simultaneously. This condition exists primarily due to non-maneuverable terrain and the surface danger zones when the large caliber weapons complexes are active. This deficit varies based on deployment schedules and changes in training requirements through time.

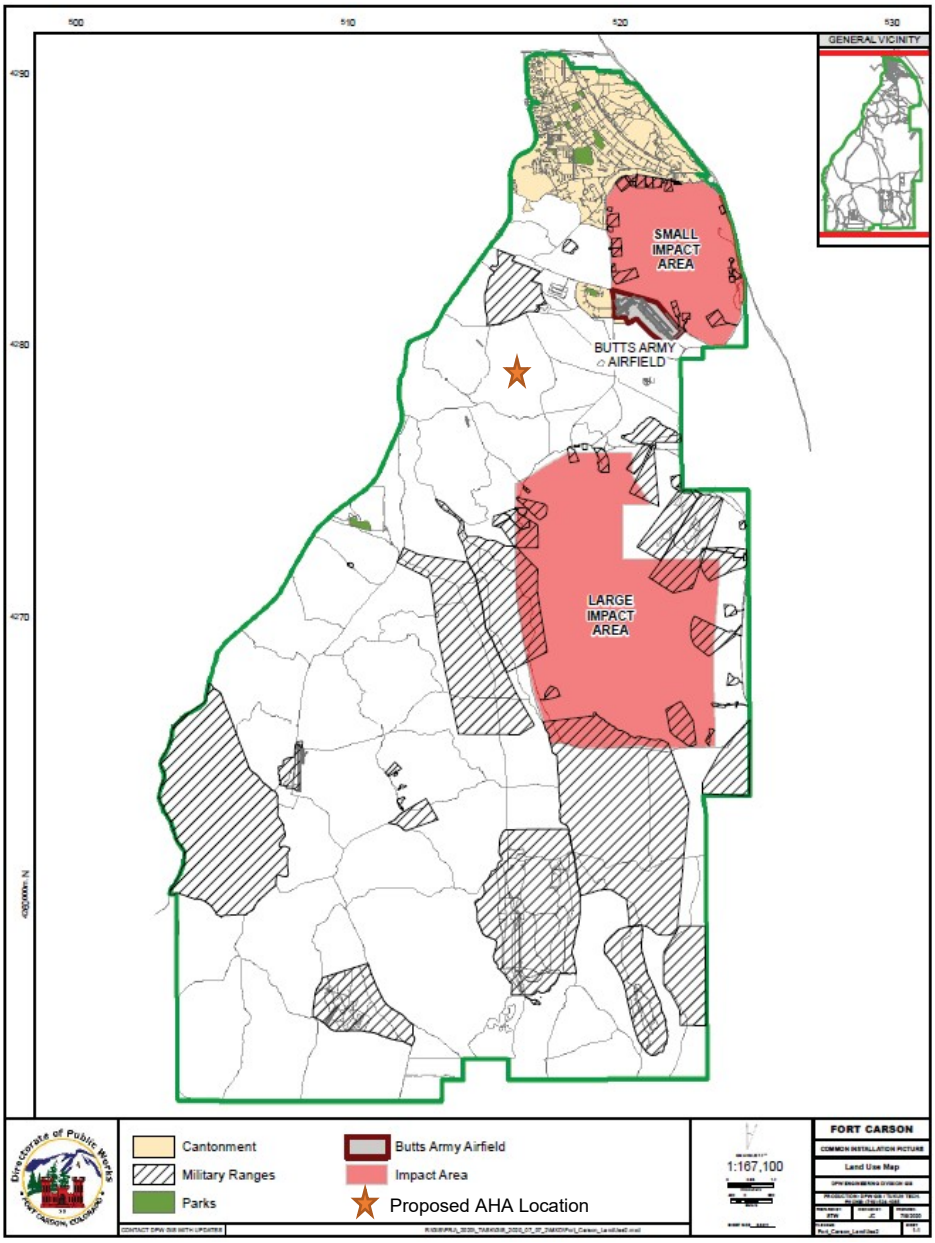

Figure 5: Land use including ranges and training areas.

4.1.2 Environmental Consequences

4.1.2.1 No Action

There would be no change in land use including the maneuverable acreage on Fort Carson under the No Action Alternative.

4.1.2.2 Proposed Action

There will be no maneuver training permitted within the area of risk. The construction and operation of the AHA will remove about 250 acres from the current maneuver

training area. This is about 0.27 percent of the maneuverable acreage on Fort Carson. This effect is minor.

The areas used to borrow material for the berms, if excavated from Fort Carson, will be remediated and available for maneuver training once vegetation is re-established. There will be no reduction in maneuverable acreage on Fort Carson should material be borrowed from a site on Fort Carson.

4.1.3 Mitigations and Best Management Practices

No mitigations are recommended.

4.2 Air Quality and Greenhouse Gases

4.2.1 Affected Environment

In Colorado, air quality is regulated by the Colorado Department of Public Health and Environment (CDPHE) and the EPA Region VIII. The Clean Air Act (CAA) of 1970, 42 USC 7401 et seq, amended in 1977 and 1990, is the primary federal statue governing air pollution. The CAA established the National Ambient Air Quality Standards (NAAQS) (40 CFR Part 50) to protect human health and welfare, allowing for an adequate margin of safety. Primary and secondary NAAQS have been established for six air pollutants, known as criteria pollutants: ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), lead (Pb), and two types of particulate matter, PM_{10} and $PM_{2.5}$. $PM_{2.5}$ is matter that is 2.5 micrometers in diameter or less and PM_{10} is matter that has diameters of between 2.5 and 10 micrometers.

Fort Carson is within the air quality control areas of El Paso, Fremont, and Pueblo counties, including the City of Colorado Springs. The northern portion of Fort Carson's cantonment area is located in a maintenance area for carbon monoxide. The *Revised Carbon Monoxide Attainment/ Maintenance Plan Colorado Springs Attainment/Maintenance Area* covers Colorado Springs as a maintenance area through calendar year 2019 (CDPHE 2009). It has not been replaced or updated at the time of this analysis. In accordance with Colorado's Revised Carbon Monoxide Attainment/Maintenance Plan Colorado Springs Attainment/Maintenance Area, USAG Fort Carson will fulfill the maintenance requirement through 2020. Because the region is not in full attainment with the NAAQS for carbon monoxide, and Fort Carson is a federal facility, proposed projects within the maintenance area must be evaluated through general conformity analysis to ensure they will not further degrade the ambient air quality.

USAG Fort Carson's stationary and fugitive emission sources, in general, include boilers, high temperature hot water generators, furnaces/space heaters, emergency generators, paint spray booths, fuel storage and use operations, facility-wide chemical use, road dust, military munitions, combustion engines and smoke/obscurant. USAG Fort Carson holds a Title V federal Operating Permit that covers emissions of both criteria pollutants and hazardous air pollutants installation-wide.

Fort Carson's Fugitive Dust Control Plan (2016) focuses on control measures to minimize fugitive dust emissions and avoid exceeding the threshold levels dictated by the state regulations. Common examples of fugitive dust are those associated with soil storage piles or unpaved roads caused by either wind or human activities such as vehicle traffic. Construction, site overlotting, demolition, and disturbed areas are also examples of fugitive dust emission sources.

4.2.2 Environmental Consequences

4.2.2.1 No Action

Under the No Action Alternative, the new AHA would not be constructed. There would be no increase in fugitive dust emissions in the area.

4.2.2.2 Proposed Action

Construction would have short-term adverse impacts on air quality due to increases in fugitive dust (i.e., airborne dust caused by vehicles, equipment, and wind) caused by the operation of heavy equipment. Once the excavation of materials, repairs, and improvements are made and the area is revegetated, there would be no long-term adverse impacts on air quality. The BMPs in *the Fort Carson Fugitive Dust Control Plan* and other permitting requirements would reduce the effects on dust emissions to minor, and Fort Carson will remain in compliance with the emissions guidelines for the state and county.

Maintenance on gravel or native surface roadways and the fire breaks would generate fugitive dust if not mitigated using BMPs outlined in the *Fort Carson Fugitive Dust Control Plan.* With the use of BMPs the effects would be short-term and minor.

The area proposed for construction is outside of the maintenance area for carbon monoxide, therefore a general conformity analysis is not necessary.

4.2.3 Mitigations and Best Management Practices

No new mitigation efforts are required. USAG Fort Carson's air quality BMPs include implementation of a *Title V Operating Permit and Fugitive Dust Control Plan.* The *Fugitive Dust Control Plan* includes taking action to ensure construction actions do not result in emissions greater than 20% opacity crossing Fort Carson's boundaries.

4.3 Biological Resources

4.3.1 Affected Environment

Fort Carson is in the Central Shortgrass Prairie ecoregion, which encompasses about 56 million acres across Colorado, Kansas, Nebraska, New Mexico, Oklahoma, Texas and Wyoming. Grassland, shrublands, forest and woodlands dominate Fort Carson. There are at least 30 state-listed noxious weed species that have invaded Fort Carson. Noxious weed management is addressed in the Integrated Pest Management Plan that includes control techniques.

Fort Carson supports large mammals such as elk, mountain lion, pronghorn, bighorn sheep, black bear, mule and white-tailed deer,. The federally threatened Mexican spotted owl and federally-endangered black-footed ferret are the only known federally listed species potentially on Fort Carson. Existing protection for Mexican spotted owls includes habitat management and limiting training and recreation in areas occupied by the species. The presence of the black-footed ferret does not limit training as is outlined in the *2013 Programmatic Safe Harbor Agreement with the U.S. Fish and Wildlife Service and the associated Biological Agreement* of October 2013.

There are five species that are under review for federal listing. They are the western bumblebee (*Bombus occidentalis*), monarch butterfly (*Danaus plexippus*), eastern spotted skunk (*Spilogale putorus interrupta*), tri-colored bat (*Perimyotis subflavus*), and the little brown bat (*Myotis lucifugus*). The 2020–2025 Fort Carson and Piñon Canyon Maneuver Site Integrated Natural Resources Plan outlines the details of the fauna of Fort Carson and current management strategies in place to ensure habitat sustainability and population viability.

There are two fish species that are state-listed as threatened. The Arkansas darter and the southern redbelly dace. The dace is found only in Quarry Pond. Lytle Pond provides potential habitat but does not have any known dace populations. The burrowing owl, a state-listed species, is widely distributed across Fort Carson and PCMS but occupies only a small percentage of available habitat. The owl is generally present on both installations March-October, but has been observed in prairie dog colonies on PCMS into December. Burrowing owls are primarily restricted to prairie dog colonies during the nesting season, but may occasionally nest in other natural burrows.

There are five Army species at risk (SAR) plant species on Fort Carson. These plant species are Dwarf milkweed (*Asclepias uncialis ssp. unicalis*), golden blazingstar (*Mentzelia chrysantha*), roundleaf four o'clock (*Mirabilis rotundifolia*), Pueblo goldenweed (*Oonopsis puebloensis*), and rayless goldenweed (*Oonopsis foliosa var. monocephala*). The Colorado checkered whiptail (*Aspidoscelis neotesselata*), mountain plover (*Charadrus montanus*); and pinyon jay (*Gymnorhinus cyanocephalus*), and the tri-colored bat (*Perimyotis subflavus*) are also SAR on Fort Carson.

The *Fort Carson Integrated Natural Resources Management Plan 2020 – 2025 (INRMP)*, guides the implementation of a natural resources program at Fort Carson and PCMS to ensure that the USAG Fort Carson complies with applicable environmental laws and regulations. The INRMP describes the procedures and BMPs used by USAG Fort Carson to ensure that potential impacts to the environment from construction, training, and operational activities are reduced.

Fort Carson's Integrated Pest Management Plan (IPMP, 2015) outlines a strategy for preventing and controlling the invasion and spread of non-native invasive and noxious species on Fort Carson. The overall objective is to implement effective, environmentally sound control methodologies for all state and county listed weed species in accordance

with any applicable federal, state, and county laws and regulations. Identification of the most effective and environmentally sound control strategies will be based upon factors such as target species, terrain, soil type, condition of the native plant community, extent of the invasion, presence of aquatic resources, wildlife use of the area, and climatic conditions. The best management of invasive species will be achieved through the use of biological, chemical, cultural and physical/mechanical control techniques.

Fort Carson's Integrated Wildland Fire Management Plan (IWFMP, 2005) lays out specific guidance, procedures, and protocols in the prevention and suppression of wildfires on all Fort Carson training lands with wildland fuels. Its goal is to convey the methods and protocols necessary to minimize wildland fire frequency, severity, and size. At the same time, it will allow military units to maintain a high level of combat readiness. It defines responsibilities of all offices, departments, and agencies involved, and describes fire pre-suppression and suppression actions to be taken on strategic and tactical bases. The document is organized around general wildfire management information; USAG Fort Carson specific information, requirements, and upgrades; and SOPs for wildfire management actions at Fort Carson.

4.3.2 Environmental Consequences

4.3.2.1 No Action

Under the No Action Alternative, the new AHA would not be constructed. The area would continue to be used for maneuver training, which causes temporary impacts to wildlife habitat. However, there would be no permanent change in wildlife habitat.

4.3.2.2 Proposed Action

The Proposed Action would result in a permanent loss of vegetation and habitat for wildlife in the area occupied by the new AHA. The habitat being disturbed is of marginal quality and is already regularly disturbed by military training. The adverse effect of this loss would be minor. There is a minor risk of increase in noxious weed spread due to construction and maintenance of the facility. This would be mitigated by minimizing ground disturbance, cleaning of vehicles before they enter the site, revegetation with Fort Carson approved seed mixes, and other standard best management practices that reduce the spread of noxious weed seeds and plant material.

Land disturbance at borrow pits would also increase the likelihood of the proliferation of invasive species. Any impacts from the off-site excavation of material on Fort Carson to prairie dog colonies would occur along the buried power line. This impact would be minimal and temporary. Material borrowing will avoid areas with active prairie dog colonies to minimize effects to the borrowing owl, which is a state listed species. The effects on biological resources would be locally moderate but less than significant; on a regional scale they would be minor.

4.3.3 Mitigations and Best Management Practices

Material borrowing will avoid areas with active prairie dog colonies to minimize effects to the borrowing owl, which is a state listed species. The Army would continue to adhere

to legal and regulatory requirements and continue to implement the INRMP, SOPs and BMPs related to biological resources and noxious weeds. The construction project would adhere to the Migratory Bird Treaty Act requirements, which includes the avoidance of construction-related disturbance impacts to migratory bird nesting areas, where possible.

4.4 Water Resources

4.4.1 Affected Environment

USAG Fort Carson's surface waters are part of the Arkansas River Basin. The northern and eastern portions of Fort Carson are located within the Fountain Creek watershed of the Arkansas River Basin and drain southeasterly into Fountain Creek. Stormwater runoff in the northern portion of the installation flows into one of four main drainages: B-Ditch, Clover Ditch, Infantry Creek, or Rock Creek, which are all tributaries to Fountain Creek. The southern and western portions of the installation drain directly into the Arkansas River to the south.

The proposed location for the AHA is adjacent to Little Fountain Creek, a tributary to Fountain Creek. This portion of Little Fountain Creek is intermittent, meaning that creek does not flow year around. The flows in these drainages consist of runoff from precipitation events and snowmelt during early spring. There is also an unnamed creek to the east of the project site. Both Little Fountain Creek and the eastern channel would likely be regulated as a Waters of the United States (WOTUS).

There is a small channel feature to the west of the project site. This feature does not appear to meet the requirements to be regulated as a WOTUS. There is a small wet area at the north of the project area as well. The waterbody is isolated and is not regulated as a Waters of the United States (WOTUS).

USAG Fort Carson has a Regional Permit (Regional General Permit 14) from the U.S. Army Corps of Engineers that authorizes the discharge of dredged or fill material for erosion control and other minor activities under Section 404 of the Clean Water Act. The permit allows most erosion control activities on Fort Carson to occur without separate permitting actions. The regional permit authorizes erosion control activities that may result in minimal individual and cumulative effects to wetlands. The typical erosion control measures include bank sloping, erosion control berms, rock armoring, crossing hardening, culvert and bridge repair, water diversion, and other approved activities.

The 2017 *Fort Carson Stormwater Management Plan* (SWMP, 2017) describes the procedures USAG Fort Carson implements to comply with requirements of the United States Environmental Protection Agency permit for USAG Fort Carson. This permit provides authorization to discharge stormwater runoff from USAG Fort Carson's Municipal Separate Storm Sewer System (MS4). It also outlines the requirements for Stormwater Pollution Prevention Plans (SWPPP).

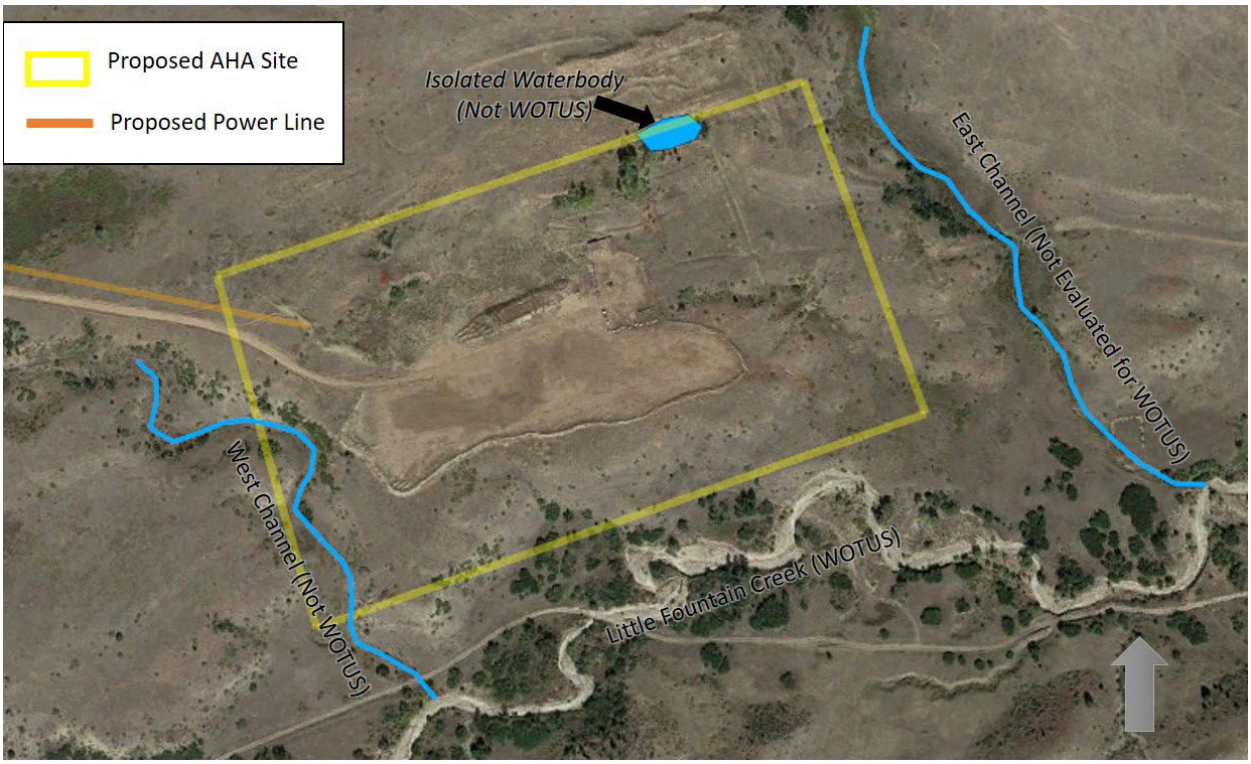

Figure 6: Locations of the four waterbodies within or adjacent to the site.

4.4.1 Environmental Consequences

4.4.1.1 No Action

Under the No Action Alternative, the new AHA would not be constructed. The area would continue to be used for maneuver training, which causes temporary impacts to water quality. This impact is mitigated by the projects implemented by the ITAM program. However, there would be no permanent change in site permeability.

4.4.1.2 Proposed Action

The Proposed Action would compact soil and in some places cover it with impermeable surfaces. This will prevent vegetation to establish or grow in these areas rendering the soil productivity to zero in the parking areas. There may be some soil erosion during the construction phase of the Proposed Action. This would be minimized through the use of BMPs. The effects to soil productivity over the region of influence would be moderate but not significant.

Stormwater run-off would be modified from the existing condition by the increase in areas with soil compaction or impervious surfaces. The area along the stream channel in project area is vegetated and would likely absorb the increase through soil infiltration and storage. The effects to stormwater run-off would be minor.

The Proposed Action would take place outside of the Little Fountain Creek Floodplain and the floodplain of the unnamed tributary to the east. The vegetation between the

activities and the creek and tributary is a sufficient buffer to filter any soil erosion that may occur during construction or maintenance activities. BMPs will further ensure that sediment is not delivered to the stream during construction. The effects to water quality from sediment erosion is negligible.

The wet area may be disturbed and/or drained during construction. The wet area is small, isolated and is not hydrologically connected to Little Fountain Creek or any other waterway. Because of the isolated nature of the wet area, disturbance and/or dewatering will have minor effects to the hydrology of the Little Fountain Creek watershed and will not negligible at the larger Fountain Creek watershed. There would be no permit requirements under Section 404 of the Clean Water Act because the wet area is not regulated as a WOTUS.

Construction may disturb or relocate up to 750 feet and about ½ acre of the channel feature on the west side of the project area. The earthwork needed to flatten the area and construct the berms around the bays would require the channel to the west to be relocated into a ditch feature along the western edge of the limits of disturbance. The affects to the hydrology of Little Fountain Creek would be minor because any water captured in the channel above the site from snowmelt or rainfall would still be delivered to Little Fountain Creek. The channel is dry a majority of the time with no indication of annual flow. The vegetation along the channel is sparse and made up of upland plant species. It originates with in the Installation boundary and has a limited drainage area. It currently provides very little value to wildlife or the hydrology of the Little Fountain Creek hydrology. The effects of disturbing or relocating the channel for the construction of the AHA will be minor at the Little Fountain Creek watershed scale and negligible at the Fountain Creek watershed scale with BMP implementation to minimize sediment entering into Little Fountain Creek.

Off-site excavation of material on Fort Carson would have the potential for short term erosion. The effects would be negligible once the remediation and re-vegetation is completed at the site.

4.4.2 Mitigations and Best Management Practices

Application of existing land management programs, including training land rotations, limited-use areas, dismounted-only areas, off-limit areas, and Land Rehabilitation and Maintenance efforts, including maintaining erosion control structures, are employed to offset the effects of training on water quality.

USAG Fort Carson would comply with Section 438 of the Energy Independence Security Act. This requires low-impact development practices that can be found in the USAG Fort Carson *Best Management Practices Operation and Maintenance Plan for Stormwater Management Structures*. Construction projects need to obtain a National Pollution Discharge Elimination System (NPDES) General Construction General Permit and prepare a Stormwater Pollution Prevention Plan (SWPPP) for all projects that would

disturb more than one acre. The SWPPP, along with the Stormwater Management Plan (SWMP), outline BMPs to prevent sediment delivery and manage stormwater on the site.

4.5 Soil Resources

4.5.1 Affected Environment

Soil types commonly occurring in the Fort Carson region are also aridisol (dry, desert-like soils) and entisol (soils that do not show any profile development and which are largely unaltered from their parent rock) soils. These soil types are characterized by moderate-to-severe erodibility, landslides, and unstable clay formation movement due to variations in moisture content and temperature. Soil erosion is a problem at Fort Carson.

Fort Carson uses an adaptive ecosystem management strategy to protect, conserve, enhance, and monitor resources and to adjust INRMP management objectives based upon the effects of training activities. Management decisions are made based on the best available science and attempt, where practical, to mimic the natural historical disturbance regimes for the ecoregion.

Monitoring programs generate the soils and land recovery data needed to determine whether the management measures and strategies are effective in achieving their intended goals and objectives. These include maintaining sustainable training lands and minimizing soil movement, minimizing soil loss from water and wind erosion.

Management of natural resources also involves the ITAM Program that establishes a uniform land management program and includes inventorying and monitoring land condition. The program also involves integration of training requirements with land carrying capacity while at the same time training to Army standard; educating land users to minimize adverse impacts; and prioritizing and implementing rehabilitation and maintenance projects. Fort Carson's ITAM is governed by AR 350-19 and FC Regulation 350-9, Integrated Training Area Management.

4.5.1 Environmental Consequences

4.5.1.1 No Action

Under the No Action Alternative, the new AHA would not be constructed. The area would continue to be used for maneuver training, which causes temporary impacts to soil productivity. This impact is mitigated by the projects implemented by the ITAM program. However, there would be no permanent change in site permeability and related soil erosion.

4.5.1.2 Proposed Action

Construction would cause a temporary increase in soil erosion, sedimentation and run-off, as well as permanent loss of soil in areas of new impervious surfaces. Much of the area being proposed for the new AHA has been previously disturbed, although some

areas have re-established marginal wildlife habitat since the last disturbance. Overall, the impacts would be minor. The effects would be mitigated by existing practices to minimize soil erosion such as BMPs in the SWMP. The SWPPP developed for the NPDES Construction General Permit also includes soil erosion mitigation that would reduce the effects of the construction and the long-term effects from changes to stormwater management at the sites.

Collection of soils from borrow sites and placement of materials to construct berms would result in soil disturbance. Overall, the effects of construction/repair on soils under the Proposed Action would be moderate. Operation of the dam under the Proposed Action would have negligible impacts to soils once the bemrs and borrow site are stabilized. The collective effects on soil resources would be minor.

4.5.2 Mitigations and Best Management Practices

No new mitigations are required to protect soil resources. USAG Fort Carson would continue to adhere to legal and regulatory requirements, and continue to use adaptive management in implementing approved management plans, standard operating procedures, and BMPs related to soil resources.

4.6 Cultural Resources

4.6.1 Affected Environment

Cultural resources are the non-renewable remnants of past human activities that have cultural or historical value and meaning to a group of people or a society. For the purposes of this EA, the term “cultural resources” includes historic properties, as defined in the National Historic Preservation Act; archaeological resources, as defined in the Archaeological Resources Protection Act; cultural items, as defined in the Native American Graves Protection and Repatriation Act; sacred sites, as defined in Executive Order 13007; and collections, as defined in 36 CFR 79.

Cultural resources on Fort Carson represent every period of human occupation from the Paleoindian stage to the present, and include prehistoric lithic scatters, camps, and architecture; prehistoric and historic quarries and mining sites; prehistoric and historic rock art; historical homesteads and ranches; stage and trail remnants; historic districts; historic buildings, structures, and objects; and sacred sites.

The *Fort Carson Integrated Cultural Resource Management Plan* (2017-2022 ICRMP) provides a framework to integrate the legal requirements for cultural resources management into the everyday operation of the USAG Fort Carson military mission and supporting activities. The main purpose of the ICRMP is to establish cultural resources goals, objectives, and policies that the USAG Fort Carson will use to identify and manage its cultural resources. The ICRMP also guides the Garrison Commander, the Cultural Resources Manager, and other key personnel in carrying out their responsibilities and in their decision-making regarding the management of cultural resources. It serves as a funding identification document for the management of

cultural resources on military lands. It provides BMPs and SOPs to ensure potential impacts to cultural resources from military training and operational support activities are minimized.

To streamline Section 106 consultation in accordance with 36 CFR 800.14(b), USAG Fort Carson, the Colorado State Historic Preservation Officer, and the Advisory Council on Historic Preservation have executed two programmatic agreements that cover routine undertakings occurring on Fort Carson. The *Programmatic Agreement among the U.S. Army Garrison Fort Carson, Colorado State Historic Preservation Officer, and the Advisory Council on Historic Preservation regarding Military Training and Operational Support Activities Downrange Fort Carson, Colorado* (Fort Carson Downrange Programmatic Agreement), executed March 31, 2014, and amended May 2, 2018, applies to downrange Fort Carson, which includes the project area.

The Proposed Action is not considered an exempted undertaking under the Fort Carson Downrange PA; therefore, additional Section 106 consultation was required. In accordance with Section 106 of the NHPA, the USAG Fort Carson has determined "no historic properties affected". NHPA Section 106 consultation was completed in July 2021. The SHPO concurred with the finding of "no historic properties affected' via correspondence dated 3 June 2021 (HC #79810). Response were also received from the Comanche Nation of Oklahoma and Pawnee Nation of Oklahoma.

4.6.1.1 No Action

Under the No Action Alternative, the new AHA would not be constructed. There would be no effect to any cultural resources in the area.

4.6.1.2 Proposed Action

Three areas of potential effects (APEs) have been identified: a direct, physical APE that includes the limit of disturbance for the construction, operation, and maintenance of the AHA, as well as the utility corridor, plus a 65-foot (20-meter) buffer; a direct, physical APE that includes the area at risk plus a 165-foot (50-meter) buffer; and an indirect, visual APE that includes a 3-mile radius surrounding the project location and takes into account topography and vegetation.

To identify historic properties within the APEs, the Cultural Resources Manager (CRM) reviewed data maintained by the Fort Carson Cultural Resources Program, as well as data provided in the COMPASS database maintained by the Office of Archaeology and Historic Preservation, History Colorado. There are no known protected cultural resources within the physical or the visual APEs. Effects to cultural resources as a result of the construction and operations would be negligible.

Cultural resources identified through previous survey work would have the potential to be impacted by borrow pit activity. Additionally, culturally significant materials could be unearthed during excavation. Upon selection of the borrow pits, Section 106 consultation would be initiated.

Through avoidance, known significant cultural resources would not be impacted by either alternative.

4.6.2 Mitigations and Best Management Practices

No new mitigations are required to protect cultural resources. USAG Fort Carson would continue to adhere to legal and regulatory requirements, and continue to use adaptive management in implementing approved management plans, SOPs, and BMPs related to cultural resources.

4.7 Health and Safety

4.7.1 Affected Environment

An AHA provides a safe and secure temporary storage for ammunition and explosives used to conduct weapon systems qualifications as well as gunnery and live fire training for soldiers. The storage of ammunition comes with the risk of accidental explosions. An explosive site plan is developed for any potentially explosive site. The plan is intended to ensure minimum risk to human life, equipment, and assets while meeting mission requirements. This is done through distancing the potentially explosive site from other facilities or properties as well as provide proper design of potentially explosive sites to suppress explosive effects. (Department of the Army Pamphlet 385-65 Explosive Site Plan Development and Submission)

The areas at risk are the areas that could be affected if an explosive event should occur at the AHA. It is determined using the maximum amount of explosive material that would be stored at the facility and the storage locations, for the AHA this is analyzed for each bay. There are two primary area of risk magnitudes that are considered during site planning and construction. The first is the public transportation route (PTR) distance. This is the distance a potentially explosive site needs to be from a PTR. A PTR is any public street, highway, railroad or navigable waterway used by the general public. The largest of the areas of risk, and the one often used for siting a potentially explosive site, is the inhabited building distance (IBD). The IBD is the minimum distance between an inhabited building and the potentially explosive facility. Inhabited buildings are buildings occupied in whole or in part by human beings both inside and outside the installation. Examples include administrative buildings, schools, or homes. In the case of this AHA, areas with high recreation use are being treated as inhabited buildings, such as the Olympic Training Area or Womack Reservoir.

4.7.2 Environmental Consequences

4.7.2.1 No Action

Under the No Action Alternative, the new AHA would not be constructed. There would be no change in the current area of risk on Fort Carson from temporary ammunition storage.

4.7.2.2 Proposed Action

An Explosives Safety Site Plan (ESSP) is a document that describes the proposed site construction specifications, the explosive potential, and the area of at risk buffers to demonstrate compliance with explosive safety standards. An ESSP is being prepared for the AHA at TA10 in accordance with Department of the Army Pamphlet 385-65 Explosive Site Plan Development and Submission.[1]

The preliminary findings of the ESSP for the AHA will have an IBD of 1,250 feet and a PTR distance of about 690 feet. There are no inhabited buildings or public transportation routes within the IBD. The only roads within the PTR distance are restricted to range operation and mission support personnel only, meeting safety requirements. There would be a negligible increase in risk to health and human safety.

4.7.3 Mitigations and Best Management Practices

There are no recommended mitigations.

4.8 Environmental Consequences Summary

Table 2: Summary of effects by resource elements.

Resource Elements	Effects of the Proposed Action
Land Use and Compatibility	Minor
Air Quality and Greenhouse Gases	Minor
Biological Resources	Locally moderate but less than significant, on a regional scale they would be minor.
Water Resources	Minor effects to stormwater and the Little Fountain Creek watershed and negligible effects at the Fountain Creek watershed
Soils	Minor
Cultural Resources	No Effect
Health and Safety	Negligible Increase in Risk

[1] The ESSP is being prepared for 50 bays, which is the total number of bays needed to meet all of the forecasted needs at Fort Carson. However, the foreseeable funding is only sufficient for 20-24 bays which is what is being analyzed in this EA. Additional analysis will occur for the construction of additional bays, if the funding becomes available in the future.

4.9 Proposed Mitigation and Best Management Practices Summary

USAG Fort Carson's air quality BMPs include implementation of a *Title V Operating Permit and Fugitive Dust Control Plan.* The *Fugitive Dust Control Plan* includes taking action to ensure construction actions do not result in emissions greater than 20% opacity crossing Fort Carson's boundaries.

Material borrowing will avoid areas with active prairie dog colonies to minimize effects to the borrowing owl, which is a state listed species. The Army would continue to adhere to legal and regulatory requirements and continue to implement the INRMP, SOPs and BMPs related to biological resources and noxious weeds. The construction project would adhere to the Migratory Bird Treaty Act requirements, which includes the avoidance of construction-related disturbance impacts to migratory bird nesting areas, where possible.

Application of existing land management programs, including training land rotations, limited-use areas, dismounted-only areas, off-limit areas, and Land Rehabilitation and Maintenance efforts, including maintaining erosion control structures, are employed to offset the effects of training on water quality.

USAG Fort Carson would comply with Section 438 of the Energy Independence Security Act. This requires low-impact development practices that can be found in the USAG Fort Carson *Best Management Practices Operation and Maintenance Plan for Stormwater Management Structures*.

Construction projects need to obtain a National Pollution Discharge Elimination System (NPDES) General Construction General Permit and prepare a Stormwater Pollution Prevention Plan (SWPPP) for all projects that would disturb more than one acre. The SWPPP, along with the Stormwater Management Plan (SWMP), outline BMPs to prevent sediment delivery and manage stormwater on the site.

USAG Fort Carson would continue to adhere to legal and regulatory requirements, and continue to use adaptive management in implementing approved management plans, standard operating procedures, and BMPs related to soil resources.

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5 Acronyms

4ID	4th Infantry Division
ACUB	Army Compatible Use
AHA	Ammunition Holding Area
ASP	Ammunition Supply Point
BCT	Brigade Combat Team
BMP	Best Management Practice
CAA	Clean Air Act
CDPHE	Colorado Department of Public Health and Environment
CEQ	Council on Environmental Quality
CFR	Code of federal Regulations
COARNG	Colorado Army National Guard
DPW	Directorate of Public Works
DU	Depleted Uranium
EA	Environmental Assessment
EIS	Environmental Impact Statement
ESSP	Explosives Safety Site Plan
FNSI	Finding of No Significant Impact
GHG	Greenhouse Gas
IBD	Inhabited Building Distance
ICRMP	Integrated Cultural Resource Management Plan
INRMP	Integrated Natural Resource Management Plan
ITAM	Integrated Training Area Management
IWFMP	Integrated Wildland Fire Management Plan
MSR	Main Supply Route (primary road down range)
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historical Preservation Act
NOA	Notice of Availability
NPDES	National Pollutant Discharge Elimination System
PCMS	Pinon Canyon Maneuver Site
PTR	Public Transportation Route
RCA	Radioactive Control Area
REC	Record of Environmental Consideration
ROD	Record of Decision
SAR	Species at Risk
SOP	Standard Operating Period
SPCCP	Spill Prevention, Control, and Countermeasures Plan
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
USAG	United States Army Garrison

6 List of Preparers

Name	Installation/Affiliation	Role
Anderson, Jeffrey	Fort Carson/DPTMS	Chief of Training
Bell, Angie	Fort Carson/Environmental	NEPA Program Manager
Conquest, Tyler	Fort Carson/Environmental	Stormwater Program Manager
Davis, Bert	Fort Carson/DPTMS	Range Control Officer
Fellner, Brandon	Fort Carson/Environmental	Air Program Manager
Gallegos, Joseph	Fort Carson/Environmental	Prevention and Restoration Program Manager
Gerhard, Leslie	Fort Carson/Environmental	Pest Control Program Manager
Kolise, Jennifer	Fort Carson/Environmental	Cultural Resource Program Manager
Lehmicke, Anna Joy	Fort Carson/Environmental	Wildlife Biologist
McLemore, Jeffrey	Fort Carson/Environmental	Forestry
Orphan, Richard	Fort Carson/Environmental	Traffic Control
Peyton, Roger	Fort Carson/Environmental	Conservation Branch Chief
Reeder, R. Craig	Fort Carson/Engineering	Infrastructure Branch Chief
Rice, James	Fort Carson/DPTMS	DPTMS Director
Sichmeller, Brett	Fort Carson/Engineering	Civil Engineer
Thomas, Wayne	Fort Carson/Environmental	NEPA/Cultural Branch Chief
Toles, Izail	4th Infantry Division	Safety Office Director
Wiersma, Thomas	Fort Carson/Master Planning	Master Planning
Wilson, Ted	Fort Carson/DPTMS	Air Traffic and Airspace Chief

7 References

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Appendix A: Environmental Trends and Planned Projects

New Technologies

Today's Army is continuously transforming in order to provide future warfighters with the concepts, capabilities and organizational structures they need to dominate a future battlefield. The Army Modernization Strategy describes how the Army will transform into a multi-domain force by 2035, meet its enduring responsibility as part of the Joint Force to provide for the defense of the United States, and retain its position as the globally dominant land power. Army Modernization Strategy (AMS) is the Army's plan to deliver a Multi-Domain Operations capable force and explains how the Army will operationalize the concept.

The AMS supports the priorities outlined in the Army Strategy. The Army's strategic approach is focused on maintaining the priorities and generating irreversible momentum. The six Army modernization priorities - long range precision fires, next generation combat vehicles, future vertical lift, network, air and missile defense, and Soldier lethality - remain constant. The 2019 AMS lays the foundation for future Army modernization and continuous modernization of how we fight, what we fight with, and who we are. This approach integrates the elements of doctrine, organizations, training, materiel, leader development and education, personnel, facilities, and policy within the Army, with other Joint Force elements, and alongside allies and partners.

In response to the AMS, there are several new technologies being planned and programmed for use at Fort Carson and PCMS. They include:

- Indirect Fires Protection Capability (IFPC) is a mobile, ground-based weapon system designed to defeat unmanned aircraft systems (UAS) and cruise missiles. The system will use an existing interceptor and sensor and will develop a Multi-Mission Launcher (MML) on an existing vehicle platform to support the Counter-UAS (C-UAS) and Cruise Missile Defense (CMD) missions. The system will use the Army Integrated Air and Missile Defense (AIAMD) open systems architecture, and will use the AIAMD Integrated Battle Command System as its mission command component. The IFPC is transported on wheeled vehicles. There are expected to be an additional 90 soldiers when a unit receives the IFPC system. The Armored Multi-Purpose Vehicle (AMPV) is the replacement for the M113 Family of Vehicles (FoV) within the Armored Brigade Combat Team. Iron Dome Defense System-Army (IDDS-A) will be truck-towed, multi- mission mobile air defense system developed to counter very short-range rockets, artillery and mortar threats. Extended Range Cannon Artillery 1 and 2 (ERCA 1 and ERCA 2) will deliver integrated cannon artillery technology solutions to increase lethality for U.S. Army 155 mm indirect fire systems.

- Optionally Manned Fighting Vehicle (OMFV) is a tracked vehicle and is the planned

replacement for the Bradley Fighting Vehicle. It can operate as a crewed vehicle but will also have the ability to conduct remotely controlled operations while the crew is off platform. Since OMFV is replacing an existing system no changes in manning levels are expected.

- Future Tactical Unmanned Aerial System (FTUAS) is a new Drone to replace the Army's medium size drones such as the RQ-7 Shadow. It platform will enable multi-domain capabilities for brigade air-ground operations via significant improvements in operational capability, survivability, reliability, availability, maintainability and mobility. Since FTUAS is replacing an existing system no changes in manning levels are expected.

- Army Integrated Air and Missile Defense System (AIAMD) will develop a unified air defense, by providing the ability for Soldiers to connect various air defense weapons and systems to a single command and control network, allowing the air defense Soldier to control all the various weapons and sensors that form an air defense network through a single battle command system. AIAMD is predominately a computer and networking system housed in an Engagement Operations Center facility that is transported on wheeled vehicles. Fielding of AIAMD is expected to be to existing units and no change in manning levels is expected.

- The Armored Multi-Purpose Vehicle (AMPV) is the replacement for the M113 Family of Vehicles (FoV) within the Armored Brigade Combat Team. The AMPV provides significant capability improvement over the M113 FoV in force protection, survivability, mobility and power generation to incorporate the Army's inbound network and other future technologies. The AMPV is a tracked vehicle based on the Bradley Fighting Vehicle chassis that is larger, heavier than the M113. The equipment replacement ratio is expected to be one for one and no changes in manning levels are expected.

- Extended Range Cannon Artillery 1 and 2 (ERCA 1 and ERCA 2) will deliver integrated cannon artillery technology solutions to increase lethality for U.S. Army 155 mm indirect fire systems. It will increase the systems range to over 60 km, minimize weight growth over current armaments, increase the rate of fire and reduce crew burden through automation. The ERCA 1 & 2 is expected to field to existing artillery batteries and no change in manning levels is expected. It is assumed that ERCA 1 & 2 training can be accomplished with simulated firing, firing munitions with a shorter range that will not exceed installation range boundaries, or firing at a range on a different installation that can accommodate the munition.

- Directed Energy M-SHORAD (DE M-SHORAD) will use the same chassis as the

IM- SHORAD and replace select weapons with a directed energy system to accomplish the same mission. The DE M-SHORAD is expected to field to existing units and replace equipment on a one for one basis, no change in manning levels is expected. It is assumed that the DE-M-SHORAD training can be accomplished with simulated firing, firing at targets with an appropriate backstop to intercept the directed energy beam before it leaves the firing range, or if the required airspace is available at the installation the directed system may be fired for training without constraints. ..

Stationing of Personnel

The Army is building a future force structure at Fort Carson shaped by new and emerging threats, technological advances, force caps, and a prevalence of Joint operations and a diminishing defense budget. The implementation of Army force realignments address capabilities necessary to increase lethality and survivability to set conditions to ensure ready and available Total Army forces. Force structures are changing to implement the National Defense Strategy, and synchronize the Readiness and Modernization investments to incorporate new capabilities, doctrine, and force structure for a Multi-Domain Operations (MDO) capable force in 2028 and the MDO-ready force in 2035.

Stationing Actions are planned for Fort Carson between 2021 and 2028. A total of 293 Soldiers will be added to Fort Carson between 2021 and 2028. This is a one and a half percent increase over the 2020 Soldier population of about 25,400.

Fort Carson currently does not have the barracks space to accommodate the stationing growth. The stationing and growth of enlisted personnel would require the construction of new barracks to support this action. A Battalion Headquarters building is needed to accommodate the growth, as well as the construction of other buildings to provide specialized space for future units.

Reasonably Foreseeable Planned Construction

In the Banana Belt, future plans include providing the modern standard facilities for existing Brigade Combat Teams (BCT) plus capacity for one additional BCT if possible. The campus for Space Command units is being consolidated through renovation of existing facilities or construction of new ones. Fort Carson is also looking to improve east-west connectivity through the area by expanding roadways and sidewalks.

There are construction and building improvements planned for the Butte Road Corridor in the next five (5) years. Fort Carson plans to accommodate MEDDAC facility expansions along Titus Boulevard and the construction of the NICoE facility adjacent to Evans Hospital. Additions to the Colorado Army National Guard training complex are being planned for the next five (5) years. Additional Supply Support Activity Facility is also planned for construction for the newly converted Stryker BCT.

In the Downtown District, there are plans for construction of a consolidated virtual Training Aids, Devices, Simulators, and Simulations (TADSS) and classroom facility in the training area at the southern end of the district. Fort Carson is working to improve the downtown core, including enhancing walkability within and between districts to recreational and community activities.

In the Logistic District, Fort Carson plans to construct and develop modern and sufficient land and facilities to meet the requirements of DLA and LRC. East-west connectivity through the area needs to be improved through road expansion, parking lot development and other transportation improvements. There are also plans to address flood risk factors related to B ditch in the district.

In the Residential District, Fort Carson plans on moving Abrams Elementary School in the next five (5) years. The sidewalks and trail connections in multiple locations throughout the district need to be improved, along with street improvements along Harr Avenue. Additional trail connections and open space are also proposed. A new youth sports complex just north of Building 5950 is also planned. Balfour Beatty has plans in this phase to redevelop four of the villages. The Choctaw and Arapahoe Villages are designed more densely than the current model; redevelopment may reduce the number of units in this area. The Comanche and Cheyenne Villages are also due for redevelopment, and there is potential to add units in these two villages.

There are many improvements proposed in the near future in the Wilderness Road District. First, improvements are planned for Camp Falcon, including the paving of some roads, improvement of some of the campsites to support larger recreational vehicles (RVs) through utilities connections, and expansion of the camping area itself. The defense access road (DAR) will improve circulation from the installation to Interstate (I)-25. Additional facilities envisioned include more stormwater detention infrastructure and a washrack for tactical vehicles returning to the 2BCT area from downrange. A fire station at Gate 6 is currently being designed.

The Downrange District includes range improvements including the construction of infantry squad battle courses, road improvements and utility expansion along the main travelways. Construction of a larger ammunition holding area is being planned in Training Area 10. An additional railhead west of the City of Fountain is being proposed and is under consideration pending funding.

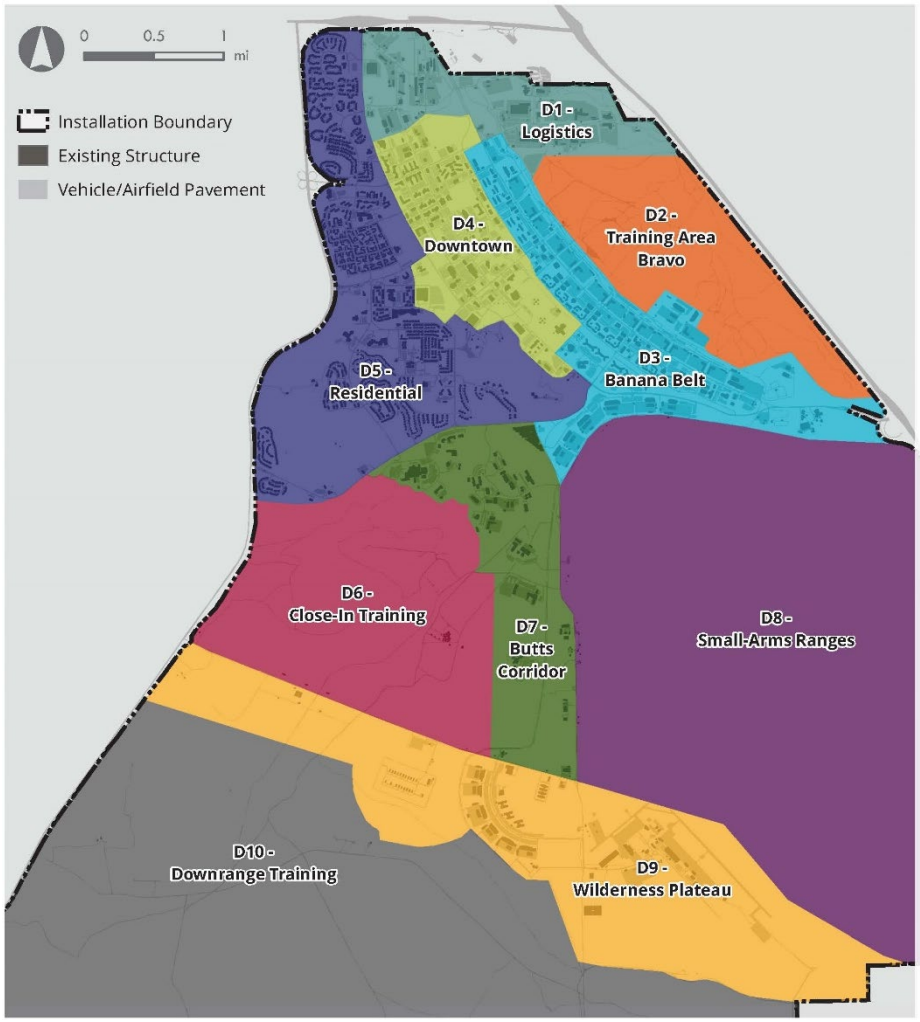

Figure 7: Map of Area Development Plan Districts at Fort Carson.

Ecological Trends

Detailed information on the ecological trends and findings of on-going monitoring can be found in the *Fort Carson Integrated Natural Resource Management Plan 2020 - 2025*. Fort Carson is located in the Central Shortgrass Prairie which is characterized by limited precipitation, hot summers, cold winters and periods of drought. Climate models predict larger and more frequent wildfires due to the increase in temperatures. There may be more intense rain events that could increase the risk of flood related damage. This may affect stream stability and floodplain connectivity which could affect stream-side vegetation and sediment transportation in the streams on Fort Carson. Climate change could increase the non-native invasive species on Fort Carson and could decrease the effectiveness of the current treatments used on invasive species. The changes in temperature and rain events could affect the ability to secure and use water to meet water needs down range for training, firefighting and wildlife.

Wetlands on Fort Carson and PCMS are mainly linear features associated with intermittent and perennial stream channels. The acreage of wetlands in both locations is remaining constant due to carefully reviewed projects and the implementation of mitigations during construction and training. Water quality remaining constant in the intermittent streams, perennial streams and reservoirs because of implementation of best management practices for construction or training.

Currently, much of the forest on the installation is overstocked and in need of thinning. There are on-going projects to reduce the tree density and the fuel loading including thinning trees, removing understory brush and re-introducing low intensity fire into the forested areas.

There are thirty state-listed non-native invasive plant species that have invaded the urban and downrange areas of Fort Carson and PCMS. There is an active program to manage and eliminate these species that includes the use of chemical control measures, biological control measures, manual removal of the plants, best management practices (such as cleaning equipment) and prescribed burning that is working to minimize the introduction and spread on the installation.

Socioeconomic Trends

El Paso County will see over five percent change in population between 2017 and 2025, and the population for the City will likely be home to about 2/3rds of these residents. By that 2045, Colorado Springs will grow to be the size of the current City and County of Denver, but with a significantly different outlook: Colorado Springs will still have room to grow, while Denver is already land locked. A significant amount of growth continues to occur outside of the City. This trend will continue to result in challenges for the fiscal sustainability of the City. Although the City's share of the County population has declined over most of the last several decades, recent data show that this trend may decline in the future due in part to demographic shifts and more urban housing choices.

The proportion of Millennials living in the city is increasing, and furthermore, the 20-30 year old age group is by far the largest for in-migration, and is the most important for fueling the city's growth. This demand is driven, in part, by the strong military presence. Without appropriate housing types, jobs, and urban amenities, we have the potential of losing a share of this important segment of our population. [2]

Relevant Management Plans

There are several relevant management plans to this proposed action.

- The Fort Carson Integrated Natural Resource Management Plan 2020 – 2025 (2020)
- The Fort Carson Integrated Cultural Resource Management Plan (2017-2022 ICRMP)
- Fort Carson's Fugitive Dust Control Plan (2016)
- USAG Fort Carson has a Regional Permit (Regional General Permit 14) from the U.S. Army Corps of Engineers
- The Fort Carson Installation Operational Noise Management Plan (2018)
- The 2017 Fort Carson Stormwater Management Plan (SWMP, 2017)
- Fort Carson's Integrated Pest Management Plan (IPMP, 2015)
- Fort Carson's Integrated Wildland Fire Management Plan (IWFMP, 2005)
- Pollution Prevention Plan (also known as the Waste Minimization Plan),
- Polychlorinated Biphenyl (PCB) Management Plan,
- Facility Response Plan,
- Hazardous Waste Management Plan
- Spill Prevention, Control, and Countermeasures Plan (SPCCP).

[2] State of the City Snapshot. Colorado Springs Planning. https://coloradosprings.gov/plancos/page/plancos-appendix-state-city-snapshots

Appendix B: Section 106 Consultation

HISTORY COLORADO

Carlos Rivero-deAguilar
Chief, Environmental Division
Department of the Army
Headquarters, United States Army Garrison, Fort Carson
1626 Evans Street, Building 1219
Fort Carson, Colorado 80913

RE: Construction, Maintenance, and Operation of an Ammunition Holding Area, Training Area 10, Fort Carson (REC2020-088) (HC# 79810)

Dear Mr. Rivero-deAguilar,

Thank you for your correspondence dated and received by our office on May 17, 2021 requesting review of the above referenced undertaking under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations 36 CFR 800.

We appreciate the additional information provided by Jennifer Kolise on May 28, 2021 through email including information on the visual effects assessments and the proposed construction. Based on the documentation and information provided through email, we agree that your finding of no historic properties affected [36 CFR 800.4(d)(1)] is appropriate for the subject undertaking.

The provided documentation notes that the location of the borrow material source may change. Should the consulted-upon scope of the work change, please contact our office for continued consultation under Section 106 of the NHPA. Also, should unidentified archaeological resources be discovered in the course of the project, work must be interrupted until the resources have been evaluated in terms of the National Register eligibility criteria (36 CFR 60.4) in consultation with our office pursuant to 36 CFR 800.13.

We request being involved in the consultation process with the local government, which as stipulated in 36 CFR 800.3 is required to be notified of the undertaking, and with other consulting parties. Additional information provided by the local government or consulting parties might cause our office to re-evaluate our eligibility and potential effect findings. Please note that our compliance letter does not end the 30-day review period provided to other consulting parties.

Thank you for the opportunity to comment. If you have any questions, please contact Matthew Marques, Section 106 Compliance Manager, at (303) 866-4678, or matthew.marques@state.co.us.

Sincerely,

Dr. Holly Kathryn Norton

Digitally signed by Dr. Holly Kathryn Norton
Date: 2021.06.03 13:56:23 -06'00'

Steve Turner, AIA
State Historic Preservation Officer

We are now accepting electronic consultation through our secure file transfer system, MoveIT. Directions for digital submission and registration for MoveIT are available at https://www.historycolorado.org/submitting-your-data-preservation-programs.

COMANCHE NATION

US Army Installation Management Command
Attn: Ms. Jennifer Kolise
1626 Evans Street, Bldg. 1219
Colorado 80913-4143

June 16, 2021

Re: Construction, Maintenance, and Operation of an Ammunition Holding Area, Training Area 10, Fort Carson (REC2020-088)

Dear Ms. Kolise:

In response to your request, the above reference project has been reviewed by staff of this office to identify areas that may potentially contain prehistoric or historic archeological materials. The location of your project has been cross referenced with the Comanche Nation site files, where an indication of ***"No Properties"*** have been identified. (IAW 36 CFR 800.4(d)(1)).

Please contact this office at (580) 595-9960/9618) if you require additional information on this project.

This review is performed in order to identify and preserve the Comanche Nation and State cultural heritage, in conjunction with the State Historic Preservation Office.

Regards

Comanche Nation Historic Preservation Office
Theodore E. Villicana , Technician
#6 SW "D" Avenue, Suite C
Lawton, OK. 73502

Consult Response delayed due to Covid-19 work conditions.

Pawnee Nation

Tuesday, June 22, 2021

Jennifer Kolise
Cultural Resources Manager/Tribal Liaison
NEPA and Cultural Management Branch
Environmental Division
US Army Garrison Fort Carson
Fort Carson, El Paso County, Colorado

RE: Section 106 Consultation and Review on:
REC2020-088
Construction, Maintenance, and Operation of an Ammunition Holding Area Training Area 10
Fort Carson, El Paso County, Colorado

The Pawnee Nation Office of Historic Preservation has received the information and materials requested for our Section 106 Review and Consultation. Consultation with the Pawnee nation is required by Section 106 of the National Historic Preservation Act of 1966 (NHPA), and 36 CFR Part 800.

Given the information provided, you are hereby notified that the proposed project/s should not affect the cultural landscape of the Pawnee Nation.

However, be advised that additional undiscovered properties could be encountered, and they must be immediately reported to us under both the National Historic Preservation Act and the Native American Graves Protection and Repatriation Act regulations.

This information is provided to assist you in complying with 36 CFR Part 800 for Section 106 Consultation procedures. Should you have questions, please do not hesitate to contact me at jreed@pawneenation.org or by phone at 918-762-2180 ext 220. Thank you for your time and consideration.

Sincerely,
Matt Reed
Historic Preservation Officer
Pawnee Nation of Oklahoma

Historic Preservation Office
Matt Reed
Phone: 918.762.2180
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