

**Finding of No Significant Impact  
for the Programmatic Environmental Assessment  
for Weapons Modernization Stationing, Fielding,  
Operations, and Maintenance  
Fort Hood (Formerly Fort Cavazos), Texas**

**Final**

**July 2025**



**Prepared by:  
Chloeta and Scout**

Cover:

Top photo: An IFPC system set before a sunset. Photo credit, U.S. Army David Huskey,  
Program Executive Office Missiles and Space

Bottom photo: A SGT STOUT vehicle driving up a dirt road. Photo credit, Spc. Andrew  
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## INTRODUCTION

The National Environmental Policy Act of 1969 (NEPA) (42 United States [U.S.] Code Section 4321 *et seq.*) requires federal agencies to consider potential environmental impacts prior to undertaking a course of action.

In accordance with NEPA, Department of Defense National Environmental Policy Act Implementing Procedures, 30 June 2025 and Army Regulation 200-1, the Army has prepared this Programmatic Environmental Assessment (PEA).

This PEA is titled “Programmatic Environmental Assessment for Weapons Modernization, Stationing, Fielding, Operations, and Maintenance Fort Cavazos, Texas.” This PEA is incorporated by reference in this Finding of No Significant Impact (FONSI) and has been developed to analyze the potential environmental consequences that could result from implementation of stationing and fielding up to eight weapons systems at Fort Hood (formerly Fort Cavazos<sup>1</sup>). These weapons systems include the SGT STOUT, Lower Tier Air and Missile Defense Sensor (LTAMDS), M10 Booker Combat Vehicle (M10 Booker), Indirect Fire Protection Capability (IFPC), Dark Eagle, Mid-Range Capability (MRC) System, Multi-Domain Task Force (MDTF), and the High-Power – Directed Energy (HP-DE) Systems.

Fielding these systems would enhance the Army’s capability to defeat advanced and future threats, providing new capabilities to soldiers, and integrate with new and existing systems. The intent of fielding and stationing these weapons systems is to create a modernized Army capable of conducting multi-domain operations as part of an integrated Joint Force that is ready to conduct multi-domain operations across an array of scenarios in multiple theaters by 2035.

This PEA provides a broad and programmatic analysis to determine potential impacts on the environmental and socioeconomic areas of concern. Decisions on which weapons systems to station at Fort Hood will be made by Army decision makers based on the information in this PEA and FONSI as well as other mission-related considerations.

## PROPOSED ACTION

The Army’s proposed action is the fielding, stationing, operations, and maintenance of up to eight weapons systems at Fort Hood. These systems are an essential step in the realization of the Army Modernization Strategy outline for transforming the Army into a multi-domain force by 2035.

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<sup>1</sup> Pursuant to a Presidential directive issued in June 2025, the U.S. Army has officially redesignated the installation formerly known as Fort Cavazos back to its historic name, Fort Hood, under a new namesake, Col. Robert B. Hood, who served during World War 1.

This FONSI and PEA reference documents and materials that may still utilize the prior installation name. While ongoing efforts are in place to update referenced materials, such as plans, agreements, and studies, to reflect the redesignation, some materials referenced may refer to the installation as Fort Cavazos. The PEA which this FONSI accompanies is titled Fort Cavazos, and that title will remain unchanged, as the PEA has been finalized. However, all analysis remains fully applicable to this FONSI which has been revised to reflect the recent redesignation. The content of referenced materials remains relevant and applicable to Fort Hood as it stands at the time of this publication.

## PROPOSED ACTION ALTERNATIVES

The PEA evaluated three action alternatives and the no action alternative. The alternatives considered and analyzed in the PEA were:

### No Action Alternative

Implementation of the no action alternative would mean that none of the proposed weapons systems would be fielded or stationed at Fort Hood. Under the no action alternative, the Army would not enhance its structural Multi-Domain Operations capabilities. Although implementation of the no action alternative would not meet the purpose and need, or the objectives of the Army Modernization Strategy, the no action alternative serves as the baseline for the comparison of potential impacts to all resource areas.

### Alternative 1

Alternative 1 includes the fielding and stationing of the SGT STOUT weapon system and associated soldiers to Fort Hood. Alternative 1 meets all six of the screening criteria.

The SGT STOUT weapon system would be a new capability for Fort Hood and would not replace any existing systems.

The fielding and stationing of the SGT STOUT weapon system involves the support of approximately 675 soldiers. An estimated 911 family members, including spouses and children, might accompany the soldiers. This could result in an overall increase of 1,586 to the Fort Hood population.

### Alternative 2

Alternative 2 includes the fielding and stationing of the SGT STOUT, LTAMDS, M10 Booker, IFPC, Dark Eagle, MRC, and HP-DE weapons systems and associated soldiers to Fort Hood. Alternative 2 meets all six of the screening criteria.

The LTAMDS is similar to the PATRIOT AN/MPQ-65 radar system and is slated to replace the PATRIOT AN/MPQ-65 radar on a one for one basis. The SGT STOUT, M10 Booker<sup>2</sup>, IFPC, Dark Eagle, MRC, and HP-DE weapons systems would be new capabilities for Fort Hood and would not replace any existing systems.

The fielding and stationing of the SGT STOUT, LTAMDS, M10 Booker, IFPC, Dark Eagle, MRC, and HP-DE involves the support of approximately 1,330 to 2,000 soldiers. An estimated 1,877 to 2,700 family members, including spouses and children, might accompany the soldiers. This could result in an overall increase of 3,207 to 4,700 to the Fort Hood population.

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<sup>2</sup> On June 11, 2025, the Army officially announced the cancellation of the M10 Booker program. Since some M10 Booker Combat Vehicles currently remain in the final stages of production and may be accepted/fielded by the Army in the future, this NEPA document includes analysis of potential environmental effects associated with the stationing, fielding, and operating of the M10 Booker. This inclusion also provides preliminary analysis for a possible future light armored vehicle that could be developed to meet the Army's need for a light armored vehicle system.

**Alternative 3**

Alternative 3 includes the fielding and stationing of the SGT STOUT, LTAMDS, M10 Booker, Full MDTF, and HP-DE weapons systems to Fort Hood. Alternative 3 meets all six of the screening criteria.

The LTAMDS is similar to the PATRIOT AN/MPQ-65 radar system and is slated to replace the PATRIOT AN/MPQ-65 radar on a one for one basis. The SGT STOUT, M10 Booker, Full MDTF, and HP-DE weapons systems would be new capabilities for Fort Hood and would not replace any existing systems.

The fielding and stationing of the SGT STOUT, LTAMDS, M10 Booker, Full MDTF, and HP-DE weapons systems involves the support of approximately 3,075 soldiers. An estimated 4,151 family members, including spouses and children, might accompany the soldiers. This could result in an overall increase of 7,226 to the Fort Hood population.

**SUMMARY OF ENVIRONMENTAL EFFECTS**

Each resource area was analyzed for potential impacts resulting from the proposed action, including any reasonably foreseeable effects. Potential impacts that could result from the implementation of the action can be both beneficial and adverse. The degree of environmental beneficial and adverse impacts is characterized as none, negligible, minor, moderate/less than significant, significant but mitigable, and significant.

*Clarification of Impact Terminology*

The Army acknowledges that the definition of “adverse” impacts provided in Section 3.1 of the PEA, specifically, “the impact of implementing the action would not benefit the resource/issue,” may be interpreted as limited to neutral effects and does not explicitly convey the potential for detrimental or negative effects to resources. Adverse impacts should be understood to encompass the full range of negative, detrimental, or harmful effects to a resource, including but not limited to degradation, loss of function, or other undesirable environmental outcomes. The analysis in the PEA considered these types of detrimental effects in its impact determinations, so the conclusions of the analysis remain valid with this clarified definition.

Impacts are anticipated to be minimized through avoidance and the implementation of existing environmental protection measures. Avoidance strategies depend on the alternative selected and where construction activities are planned. Examples of environmental protection measures would include implementing erosion and stormwater control measures; maintaining vehicles and equipment, and sustaining vegetation cover at the construction sites. The Army will continue to adhere to legal and regulatory requirements and continue to implement its approved management plans, standard operation procedures, and best management practices (BMPs).

Implementation of the selected alternative may require additional site-specific analyses, including follow-on NEPA evaluations, to address actions necessary for fielding, stationing, siting considerations, and other environmental issues. With the implementation of the identified BMPs outlined below and further evaluation of site-specific design plans, no significant impacts are anticipated from any of the proposed action alternatives assessed in this PEA.

The analysis in this PEA determined that BMPs may be implemented should future supporting construction and operation analysis activities be determined significant. Future anticipated operational impacts and associated BMP incorporation as follows will ensure impacts remain less than significant. These impacts and subsequent BMPs are detailed by resource area as described below.

- **Air Quality – less than significant**

- Impacts: Alternative 1 would result in a slight increase in fuel use, air emissions, and traffic due to the fielding of new weapons systems and additional personnel, but emissions would not exceed air quality standards. Alternative 2 would have similar impacts as alternative 1, with slight increases in fuel use, air emissions, and traffic from the new weapons systems and personnel influx. This could affect local air quality, but emissions would remain within air quality standards. Alternative 3 would lead to a moderate increase in fuel use, air emissions and traffic potentially impacting air quality. While this alternative could have moderate adverse impacts on air quality, emissions would not exceed air quality standards, and no significant impacts are expected. None of the alternatives are expected to impact air quality to the extent of violating ambient air quality standards.
- Best Management Practice(s): For all alternatives, fugitive dust generation from weapon system maneuvers is expected and dust control measures may need to be implemented. If additional infrastructure is needed to support the weapons systems, construction may require permitting, and new stationary sources may need to be reviewed and included in the installation's air permit. Supplemental NEPA analysis may be required depending on the specific infrastructure requirements.

- **Airspace – less than significant**

- Impacts: All of the proposed alternatives involve the fielding and stationing of ground-based systems that would only have the opportunity to impact airspace through test-firing and training. It is assumed that the Special Use Airspace above ranges at Fort Hood would follow all applicable regulations according to the Federal Aviation Administration (FAA) and Army Regulations. Implementation of alternative 1 would not cause a substantial infringement of general aviation or commercial flight. The airspace over Fort Hood is sufficient to support training for most of the alternative 2 weapons systems. If live fire cannot be accommodated in Fort Hood airspace, simulation fire would be utilized during training activities. Like alternative 2, the impact on airspace from alternative 3 is mitigable (through coordination) to a less than significant level.
- Best Management Practice(s): Coordination with the FAA (and potentially the Laser Clearinghouse) would ensure compliance with FAA safety regulations and prevent interference with general aviation and commercial flights.

- **Biological Resources – less than significant**

- Impacts: All action alternatives could result in minor adverse impacts, with vegetation effects expected to be long-term due to ongoing live-fire and maneuver training. However, these impacts are considered minor and less than significant as they align with existing activities on the installation. Wildlife displacement would occur with a 7.5 percent (alternative 2) or 11.5 percent (alternative 3) increase in soldiers, while alternative 1, involving only a 2.5 percent population increase, is not expected to

- impact wildlife. Wildlife on Fort Hood has adapted to live-fire training and maneuvering on the ranges and is unlikely to react adversely to additional training.
- **Best Management Practice(s):** Briefing units before each training event on environmentally sensitive areas, such as federally protected species habitats, and reinforcing established protocols is a key strategy to mitigate ecological impacts. Effective implementation of conservation measures outlined in the Fort Cavazos Integrated Natural Resources Management Plan, the 2020 U.S. Fish and Wildlife Service (USFWS) Biological Opinion (BO) (USFWS #02ETAU00-2020-F-0856), and other established BMPs will reduce the risk of incidental take and habitat degradation. The 2020 BO specifically outlines an adaptive management framework for species such as the golden-cheeked warbler, including seasonal restrictions, population monitoring, and habitat thresholds to remain within authorized take limits. If new construction is proposed in areas where listed species or their habitats may be affected, supplemental Endangered Species Act consultation with the USFWS may be required. Additionally, utilizing existing road networks and maintaining activities within established boundaries of training ranges and maneuver areas will further minimize adverse effects to listed species and sensitive habitats.
  - **Cultural Resources – less than significant**
    - **Impacts:** Increased training activities are expected to have less than significant impacts on cultural resources. However, an increase in personnel raises the risk of encountering or disturbing cultural resources. Construction and ground-disturbing activities, including developing new training areas or infrastructure, could impact cultural resources and block access to sacred sites. Identifying cultural resources within the area of potential effect would be required before any ground-disturbing activities take place.
    - **Best Management Practice(s):** Identifying resources within the area of potential effect before activities begin, combined with applying BMPs would help avoid adverse effects. Monitoring, training personnel to report cultural materials, and implementing BMPs would further reduce potential impacts. While an increase in personnel raises the likelihood of encountering or disturbing cultural resources, adherence to Standard Operating Procedures and BMPs for resource training, identification, and protection would effectively mitigate these impacts. If new construction is required to implement this alternative, a supplemental NEPA analysis might be required.
  - **Geological and Soil Resources – minor**
    - **Impacts:** Implementing any action alternative would increase maneuver training, potentially damaging vegetation, disturbing soils, and causing erosion or altered drainage patterns. Construction activities may also compact soils, increase erosion and stormwater runoff, and affect groundwater recharge. Alternative 1 is not anticipated to impact geologic or soil resources. For alternatives 2 and 3, population increases are not expected to impact soils beyond those effects from construction and training, resulting in only minor soil impacts.
    - **Best Management Practice(s):** Adhering to stormwater management plans and BMPs, along with the Integrated Training Area Management work plan and the installation's Integrated Natural Resource Management Plan, will help minimize these impacts. Additionally, the Army's use of existing facilities and control measures will further mitigate potential effects.



- **Hazardous and Toxic Materials and Waste – less than significant**
  - Impacts: It is assumed that the installation will adhere to all federal, state, local, and Army installation regulations. Alternative 1 is not expected to significantly increase hazardous materials (HM) or hazardous waste (HW), as it mainly involves fuel, vehicle fluids, lubricants, and munitions, with minimal environmental impact. Alternative 2 is similarly expected to have less than significant impacts on HM and HW. Alternative 3 would increase HM use and HW generation slightly compared to alternatives 1 and 2, but the overall impact would remain minor and less than significant. All alternatives are expected to have less than significant impacts on hazardous and toxic materials and waste.
  - Best Management Practice(s): Management of HM and HW will comply with regulations. Construction debris will be recycled or disposed of in approved landfills. HM and HW resulting from the action alternatives will be managed under the Hazardous Waste Management Plan, with procedures in place to minimize spills during refueling. In the event of a spill, clean-up will follow established plans and Standard Operating Procedures. Munitions will be handled safely, with spent casings disposed of according to environmental laws. All alternatives will follow the Hazardous Waste Management Plan and will comply with federal, state, local, and Army Regulations.
- **Noise – less than significant**
  - Impacts: Implementation of any of the action alternatives would not alter the peak noise levels currently generated on Fort Hood. If the operations tempo increases, then day-night noise levels would also increase, a quantitative noise analysis should be completed to determine whether noise contours extend off-installation in populated areas.
  - Best Management Practice(s): The approved noise models for small arms 50 caliber and below is Small Arms Range Noise Assessment Model and Blast Noise Version 2 for large caliber weapons greater than 50 caliber and includes artillery rounds. Should modeling be necessary for a supplemental NEPA analysis, Small Arms Range Noise Assessment Model and Blast Noise Version 2 would be used to assess noise impacts.
- **Socioeconomics – less than significant**
  - Impacts: Concerning socioeconomics, all action alternatives are anticipated to cause increases in employment, sales volume, income, and population which would all be beneficial but less than significant compared to the region of influence.
  - Best Management Practice(s): None needed, in terms of race and origin, the Army population generally reflects the diversity across the U.S. Actions associated with the fielding and stationing of the weapons systems, including training activities and construction of any required support facilities, would occur within the boundaries of the installation and therefore would not cause disproportionately high or adverse human health or environmental effects on minority or low-income populations.
- **Transportation and Traffic – less than significant**
  - Impacts: The increase of soldiers and their family members associated with all action alternatives, is expected to have only a minor impact on the existing road infrastructure. While some of the new personnel and their families may reside off-base and could potentially increase commuter traffic during peak hours, this too is anticipated to place a modest additional demand on the current road infrastructure.



- **Best Management Practice(s):** Fully implementing the road improvements as outlined in the 2020 Traffic Study would aid in alleviating potential traffic increases associated with all action alternatives. Once the exact weapon system configurations and fielding decisions are made, supplemental NEPA analysis may be necessary to assess the specific impacts on traffic and transportation infrastructure.
- **Water Resources – less than significant**
  - **Impacts:** Under all action alternatives, increases in personnel could result in increases in trash and debris that could wind up in local waterways. However, these impacts are expected to be less than significant. The addition of personnel would only slightly increase water demand for consumption, aside from alternative 3, which could impact water resources. Vehicle washing associated with the increased training is accomplished by using several closed-loop wash racks. This increase is not expected to impact water resources. Activities related to construction, increased personnel, and increased maneuvering could take place within a floodplain. Building within a floodplain could exacerbate flooding, pose greater risks to soldier safety, increase the chance of inundation and facility damage, and introduce contaminants into floodwaters.
  - **Best Management Practice(s):** Proper design of drainage control measures would minimize the accumulation of pollutants and debris in nearby waterways. Increased training activities and population have the potential to impact water resources at Fort Hood, but due to existing BMPs and control measures, the impacts are anticipated to be minor. The Army would strive to avoid constructing on floodplains. If avoidance isn't feasible, then site design, construction standards, and BMPs described in the installation Integrated Natural Resource Management Plan would be followed. Additionally, adherence to the requirements outlined in EO 11988 reduces potential impacts on floodplains to less than significant.

## PUBLIC REVIEW AND INTERAGENCY COORDINATION

### Introduction

The PEA and Draft FONSI were available for public, agency, and tribal review June 10, 2025 to July 10, 2025, which was initiated when a Notice of Availability was published in local newspapers. Electronic copies of the PEA and Draft FONSI were made available for download from the Fort Hood website at: <https://home.army.mil/hood/units-tenants/Garrison/DPW/ENV/NOA>. Comments were accepted by email at [usarmyftcavazosid-readinesslistpaostaff@army.mil](mailto:usarmyftcavazosid-readinesslistpaostaff@army.mil) or by mail to U.S. Army Garrison Fort Hood, Directorate of Public Works, Environmental Division, Attn: NEPA Program Manager, 4612 Engineer Drive Fort Hood, Texas 76544-5028.

To facilitate intergovernmental and interagency coordination of environmental planning (IICEP), Fort Hood also sent IICEP letters to government agencies and Native American Tribes requesting their review and input. These letters were sent to the State Historic Preservation Office, the USFWS, the U.S. Environmental Protection Agency, the FAA, and local Native American Tribes.

### Comments Received and Responses

Table 1 summarizes the comments received during the public and interagency review period for the PEA, along with Fort Hood's responses and how each comment was addressed in the Final FONSI, as appropriate. All comments were considered in accordance with NEPA and applicable Army and Department of Defense regulations and instructions. Copies of all comments received are provided in Appendix B. Comments that warranted more detailed revisions have been further addressed in Appendix C. Where necessary, clarifications or revisions have been incorporated into the Final FONSI to reflect public and agency input and ensure accuracy and transparency in the decision making process.

**Table 1: Public and Agency Comments and Responses**

Individual / Organization	Comment Summary	Response / Resolution in Final FONSI
USFWS Texas Coastal and Central Plains Ecological Services Office	USFWS commends the Army's long-standing partnership in conserving federally listed species at Fort Cavazos, particularly the golden-cheeked warbler, and acknowledges the Army's contributions to species research and management. While the PEA adequately describes the proposed action and alternatives, USFWS recommends that the analysis of biological resources explicitly align with the 2020 (BO). That Opinion covers military training and warbler management through an adaptive management approach. USFWS advises evaluating whether the proposed action is consistent with the 2020 BO or if reinitiation of consultation is necessary, and offers assistance if reinitiation is required.	Thank you for recognizing the longstanding partnership in conserving federally listed species at Fort Cavazos. The project team reviewed the proposed action in light of the 2020 BO and its adaptive management framework, including seasonal restrictions, maneuver boundaries, and conservation measures designed to minimize incidental take.  This review concluded the proposed action is consistent with the scope of the 2020 BO and does not introduce new effects or modifications that would require reinitiation of consultation under Section 7 of the Endangered Species Act (ESA). Ongoing coordination with USFWS, along with implementation of established conservation measures and monitoring protocols, will help ensure continued ESA compliance and support shared conservation goals.
USFWS Texas Coastal and Central Plains Ecological Services Office	USFWS requests a correction to the draft FONSI on page 4 under "Biological Resources – less than significant," where it references the 2015 BO. This should be updated to the "2020 Biological Opinion" to ensure accuracy and consistency with the current consultation.	The FONSI has been updated to replace the reference to the 2015 BO with the 2020 BO. The revised text includes details on conservation measures, adaptive management requirements, and protocols to ensure consistency with the 2020 BO and reduce impacts on federally listed species and habitats.
USFWS Texas Coastal and Central Plains Ecological Services Office	USFWS comments that the definition of "adverse" impact in Section 3.1 (Page 3-1) of the PEA is overly limited, describing it as merely "not benefitting the resource/issue," which fails to account for truly negative or detrimental effects. Given its use in contexts describing ground disturbance, vegetation loss, and habitat degradation (e.g., Table 3-1), USFWS recommends revising the definition to explicitly include detrimental impacts.	A small paragraph with the sub-heading " <i>Clarification of Impact Terminology</i> " has been added to the " <i>Summary of Environmental Effects</i> " section of the FONSI to clarify that the definition of adverse impacts should be expanded to explicitly include detrimental impacts. Thank you for your comment.

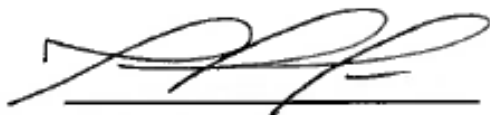
USFWS Texas Coastal and Central Plains Ecological Services Office	USFWS notes that Section 3.4.1.3 of the PEA (Protected Species) should be updated using the Service's Information for Planning and Conservation (IPaC) website to ensure accuracy. For example, Table 3-3 incorrectly includes species such as the endangered sharpnose and smalleye shiners, which are not known to occur at Fort Cavazos, while omitting other species known from the area.	The table has been updated, as well as the corresponding species information to reflect IPaC. This is included in the FONSI as Appendix C.
USFWS Texas Coastal and Central Plains Ecological Services Office	USFWS comments on Page 3-30 regarding the analysis of effects to the golden-cheeked warbler, noting the PEA's reliance on the IPaC Determination Key. While the description of the Key is accurate, it is designed for low-impact actions unlikely to result in incidental take and is not appropriate for actions covered by the existing 2020 BO. USFWS recommends that the PEA rely on the 2020 BO's framework, which includes adaptive management provisions and incidental take limits based on maintaining stable or increasing warbler population density over a 3-year average. They stress that project impacts, habitat availability, and population density must be evaluated together to ensure compliance with the BO's requirements and to avoid exceeding authorized incidental take.	FONSI Appendix C includes revised text for page 3-30, replacing the previous reliance on the IPaC Determination Key with an expanded discussion aligned with the 2020 BO. The updated section describes the BO's adaptive management framework, authorized incidental take limits, monitoring requirements, and conservation measures designed to maintain stable or increasing golden-cheeked warbler population density over a rolling three-year average, ensuring ESA compliance.
Texas Commission on Environmental Quality (TCEQ)	The proposed action is located in Coryell County, which is currently designated attainment/unclassifiable for the National Ambient Air Quality Standards for all six criteria air pollutants. Federal Clean Air Act, §176(c) general conformity requirements do not apply for this action.	Comment noted. No changes required. Thank you for your input.
TCEQ	The Office of Water does not anticipate significant long term environmental impacts from this project as long as construction and waste disposal activities associated with it are completed in accordance with applicable local, state, and federal environmental permits, statutes, and regulations. We recommend that the applicant take necessary steps to ensure that BMPs are used to control runoff from construction sites to prevent detrimental impact to surface and ground water.	Comment noted. BMPs and compliance with all applicable environmental requirements will be incorporated as recommended. Thank you for your comment.
TCEQ	Any debris or waste disposal should be at an appropriately authorized disposal facility.	Comment noted. Debris and waste will be disposed of at authorized facilities in accordance with applicable regulations.

State Historic Preservation Officer (SHPO), Executive Director of the Texas Historical Commission (THC)	The review staff has completed its review and has made the following determinations based on the information submitted for review: <b>Above-Ground Resources</b> • No adverse effects on historic properties.	Comment noted. No changes required. Thank you for your review.
SHPO, Executive Director of the THC	<b>Archeology Comments</b> • THC/SHPO concurs with the information provided.	Concurrence acknowledged. Thank you for your input.
SHPO, Executive Director of the THC	The THC thanks the United States Army for submitting the PEA for Weapons Modernization for review. We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes or if new historic properties are found, please contact the review staff. If you have any questions concerning our review, or if we can be of further assistance.	Thank you for your review and partnership. Continued coordination will be maintained, and any project changes or discoveries will be promptly communicated.

Legend: BO = Biological Opinion; ESA = Endangered Species Act; FONSI = Finding of No Significant Impact; IPaC = Information for Planning and Consulting; PEA = Programmatic Environmental Assessment; SHPO = State Historic Preservation Officer; TCEQ = Texas Council on Environmental Quality; THC = Texas Historical Commission; USFWS = United States Fish and Wildlife Service

## CONCLUSION

Based on a careful review of the PEA and comments received during the June 10, 2025 to July 10, 2025 public comment period, as well as coordination with relevant parties through IICEP letters, the Army has determined that no significant direct, indirect, or reasonably foreseeable impacts to the human or natural environment are anticipated as a result of implementation of the proposed action. The Army concludes that the three alternatives and no action alternative are not likely to have significant effects and that an environmental impact statement is not required and will not be prepared. This decision is based on the environmental and socioeconomic analysis contained in this PEA. This decision meets the requirements of NEPA and its Army NEPA regulations and has been made after considering all submitted information and examining a full range of reasonable alternatives and all environmental impacts. This concludes the NEPA process for this action.



Mark R. McClellan  
Colonel, U.S. Army  
Commanding

11 AUG 2025

Date

## FONSI APPENDIX A: SUMMARY OF THE EFFECTS FROM THE EVALUATED ALTERNATIVES

Summarized effects include direct, indirect, and reasonably foreseeable effects

Resource Area	Alternative 1	Alternative 2	Alternative 3	No Action Alternative
<b>Air Quality</b>	Less than significant adverse effects	Less than significant adverse effects	Less than significant adverse effects	None
<b>Airspace</b>	Less than significant adverse effects	Less than significant adverse effects	Less than significant adverse effects	None
<b>Biological Resources</b>	Less than significant adverse effects	Less than significant adverse effects	Less than significant adverse effects	None
<b>Cultural Resources</b>	Less than significant adverse effects	Less than significant adverse effects	Less than significant adverse effects	None
<b>Geological and Soil Resources</b>	Minor adverse effects	Minor adverse effects	Minor adverse effects	None
<b>Hazardous and Toxic Materials and Waste</b>	Negligible adverse effects	Less than significant adverse effects	Less than significant adverse effects	None
<b>Noise</b>	Less than significant adverse effects	Less than significant adverse effects	Less than significant adverse effects	None
<b>Socioeconomics</b>	Less than significant beneficial effects	Less than significant beneficial effects	Less than significant beneficial effects	None
<b>Transportation and Traffic</b>	Less than significant adverse effects	Less than significant adverse effects	Less than significant adverse effects	None
<b>Water Resources</b>	Less than significant adverse effects	Less than significant adverse effects	Less than significant adverse effects	None

**FONSI APPENDIX B: PUBLIC REVIEW, INTERAGENCY COORDINATION, AND COMMENTS RECEIVED**

This appendix provides a summary of the public participation activities associated with this Programmatic Environmental Assessment (PEA).

The PEA and Draft Finding of No Significant Impact (FONSI) were made available to federal, state, local agencies, Native American Tribes, and the public for review and comment for 30 days from June 10, 2025 to July 10, 2025. A Notice of Availability was published in local newspapers. Electronic copies of the PEA and Draft FONSI were made available for download from the Fort Hood website at: <https://home.army.mil/hood/units-tenants/Garrison/DPW/ENV/NOA>. Hard copies were also made available at the Killeen Main Library and the Copperas Cove Public Library.

Following the 30-day review of the PEA and Draft FONSI, the Army incorporated relevant substantive comments received into the Final FONSI.

The following pages include copies of all comments received.

Brooke Paup, *Chairwoman*  
Bobby Janecka, *Commissioner*  
Catarina R. Gonzales, *Commissioner*  
Kelly Keel, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

June 25, 2025

Vicki D. Dean  
NEPA Program Manager  
Department of the Army  
Installation Management Command  
DPW, Environmental Division  
USAG Fort Cavazos, Texas

Via: E-mail

Re: TCEQ NEPA Request #2025-218. WEAPONS MODERNIZATION STATIONING, FIELDING, OPERATIONS, AND MAINTENANCE AT FORT CAVAZOS, TEXAS. Coryell County.

Dear Ms. Dean,

The Texas Commission on Environmental Quality (TCEQ) has reviewed the above-referenced project and offers the following comments:

The proposed action is located in Coryell County, which is currently designated attainment/unclassifiable for the National Ambient Air Quality Standards for all six criteria air pollutants. Federal Clean Air Act, §176(c) general conformity requirements do not apply for this action.

The Office of Water does not anticipate significant long term environmental impacts from this project as long as construction and waste disposal activities associated with it are completed in accordance with applicable local, state, and federal environmental permits, statutes, and regulations. We recommend that the applicant take necessary steps to ensure that best management practices are used to control runoff from construction sites to prevent detrimental impact to surface and ground water.

Any debris or waste disposal should be at an appropriately authorized disposal facility.

Thank you for the opportunity to review this project. If you have any questions, please contact the agency NEPA coordinator at (512) 239-5538 or [NEPA@tceq.texas.gov](mailto:NEPA@tceq.texas.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Ryan Vise".

Ryan Vise,  
Division Director  
External Relations





## United States Department of the Interior FISH AND WILDLIFE SERVICE

Texas Coastal and Central Plains Ecological Services Office  
Fort Worth Sub-Office  
3233 Curtis Drive  
Fort Worth, Texas 76116  
PHONE: 817/277-1100



June 26, 2025

Timi M. Dutchuk  
Chief, Environmental Division  
Directorate of Public Works  
Department of The Army, Fort Cavazos  
Fort Cavazos, Texas 76544-5028

Dear Ms. Dutchuk:

Thank you for your June 4, 2025, letter regarding the Army's Programmatic Environmental Assessment (PEA) for Weapons Modernization Stationing, Fielding, Operations, and Maintenance at Fort Cavazos, Texas. The PEA evaluates potential environmental effects associated with the proposed stationing, fielding, operations, and maintenance of up to eight weapons systems at the Fort. The Army is requesting comments on the PEA and associated draft Finding of No Significant Impact (FONSI).

### General Comments

Our agencies have a long history of coordination and consultation with regard to federally-listed and other species known to occur at Fort Cavazos. Much of our coordination has involved one of the largest known populations of the endangered golden-cheeked warbler, which occurs at the Fort. The Army has done commendable work in advancing our understanding of this species, as well as managing the population for the purpose of recovery. We value our partnership for the continued conservation of the warbler and our Nation's military readiness.

Based on our review of the PEA, we believe it adequately describes the proposed action and alternatives that would occur at Fort Cavazos; however, we do recommend that the analysis pertaining to biological resources be closely aligned with the completed consultation between our offices that resulted in the 2020 biological opinion. The 2020 opinion is intended to cover military training, as well as management of the warbler population on the Fort. It has an adaptive management approach that can address modification of activities, provided they are within the original scope and do not trigger any of the reinitiation criteria. Therefore, we recommend the proposed action be evaluated within the context of the 2020 opinion (and associated biological assessment) to determine if it would be covered, or if a reinitiation of consultation would be needed. In case of the latter, we would be happy to work with your team to provide assistance.

Timi M. Dutchuk

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Specific Comments

Page 4 of the draft FONSI: Under “Biological Resources – less than significant,” there is a reference to the Service’s 2015 Biological Opinion for Fort Cavazos. This should be changed to “2020 Biological Opinion.”

Page 3-1, section 3.1 of the PEA: Definitions of “beneficial” and “adverse” impacts are provided. The definition of “adverse” is “*the impact of implementing the action would not benefit the resource/issue.*” This definition limits the term “adverse” to impacts that would be considered neutral, without addressing negative or detrimental impacts to resources. This is illustrated when it is used in Table 3-1, for example “*The proposed action could adversely impact natural resources from increased ground disturbance and the potential for related vegetation loss and habitat degradation.*” In this context, the impacts described are much more than the definition of “not benefitting the resource.” We recommend the definition of “adverse” include detrimental impacts.

Section 3.4.1.3 Protected Species: The list and description of species potentially occurring at Fort Cavazos should be updated using the Service’s Information for Planning and Conservation (IPaC) website. For example, Table 3-3 includes the endangered sharpnose and smallmouth shiners, which are not known to occur in the area. There are also species known from the area that are omitted from the table.

Page 3-30: The paragraph summarizing potential effects to the endangered golden-cheeked warbler relies, in part, on the Service’s Determination Key housed in our IPaC web tool. While the description of the Determination Key is correct, the Key is designed for relative low impact actions where effects to listed species are anticipated to be unlikely or insignificant. The Key is not intended for actions or activities expected to result in incidental take or that are already covered by an existing biological opinion. As noted above, the Fort’s 2020 biological opinion should be referenced to determine if the proposed actions are covered. The incidental take statement within that opinion provides the four criteria which would trigger a reinitiation of consultation. Further in this section, it is stated that impacts could occur to golden-cheeked warbler habitat if it was verified to be unoccupied by the species. Again, it is important to use the 2020 biological opinion when addressing impacts of the proposed project because it includes adaptive management provisions that allow the Army to manage the golden-cheeked warbler population by balancing incidental take and warbler density. The density estimates are tied to overall incidental take authorized under the opinion, with a limit based on 3-year average of maintaining a stable to increasing population. Thus, it is important that the population of the warbler at the Fort, as well as all activities, be considered together so that available habitat and population density can be managed to meet the Fort’s population goals and not exceed incidental take in the 2020 opinion.

Timi M. Dutchuk

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Thank you for the opportunity to provide comments on the PEA and for the Army's continued efforts to conserve America's fish and wildlife resources. If you have any questions, please contact me or Omar Bocanegra of my staff at [omar\\_bocanegra@fws.gov](mailto:omar_bocanegra@fws.gov).

Sincerely,

CATHERINE  
YEARGAN

Digitally signed by  
CATHERINE YEARGAN  
Date: 2025.06.26  
15:07:07 -05'00'

Catherine Yeargan  
Field Supervisor

**From:** [noreply@thc.state.tx.us](mailto:noreply@thc.state.tx.us)  
**To:** [Dean, Vicki D CIV USARMY ID-READINESS \(USA\)](#); [reviews@thc.state.tx.us](mailto:reviews@thc.state.tx.us)  
**Subject:** PEA for Weapons Modernization Stationing  
**Date:** Wednesday, July 9, 2025 2:20:27 PM

You don't often get email from [noreply@thc.state.tx.us](mailto:noreply@thc.state.tx.us). [Learn why this is important](#)



**Re: Project Review under Section 106 of the National Historic Preservation Act  
THC Tracking #202511191**

**Date:** 07/09/2025

PEA for Weapons Modernization Stationing  
Fort Cavazos

**Description:** Fort Cavazos is inviting you to review and provide comments on the PEA.

Dear Vicki D. Dean:

Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act.

The review staff, led by Marie Archambeault, Rebecca Shelton, Caitlin Brashear and Alexander Shane, has completed its review and has made the following determinations based on the information submitted for review:

**Above-Ground Resources**

- No adverse effects on historic properties.

**Archeology Comments**

- THC/SHPO concurs with information provided.

We have the following comments: The Texas Historical Commission thanks the United States Army for submitting the Programmatic Environmental Assessment for Weapons Modernization for review.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: [marie.archambeault@thc.texas.gov](mailto:marie.archambeault@thc.texas.gov), [rebecca.shelton@thc.texas.gov](mailto:rebecca.shelton@thc.texas.gov), [caitlin.brashear@thc.texas.gov](mailto:caitlin.brashear@thc.texas.gov), [Alexander.Shane@thc.texas.gov](mailto:Alexander.Shane@thc.texas.gov).

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit <http://thc.texas.gov/etrac-system>.

Sincerely,



for Joseph Bell, State Historic Preservation Officer  
Executive Director, Texas Historical Commission

**Please do not respond to this email.**



## FONSI APPENDIX C: UPDATED BIOLOGICAL RESOURCES CONTENT TO ADDRESS USFWS AGENCY REVIEW

This appendix provides the updated U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) official species list for the Fort Hood action area. It has been prepared to address USFWS comments on the Final Programmatic Environmental Assessment (PEA) and to replace the previous species information with the most current IPaC results. This appendix updates Section 3.4.1.3 of the PEA by identifying federally listed threatened, endangered, and candidate species that may occur in the region or be affected by the proposed action, ensuring consistency with USFWS recommendations and supporting compliance with the Endangered Species Act (ESA).

**Table C-1: Revised PEA Table 3-3: Federally Listed Threatened and Endangered Species with Potential Occurrence at Fort Hood**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Status</b>	<b>Known Presence on Fort Hood</b>
Tricolored Bat	<i>Perimyotis subflavus</i>	PE	Yes
Golden-cheeked Warbler	<i>Setophaga chrysoparia</i>	E	Yes
Piping Plover	<i>Charadrius melodus</i>	T	No
Rufa Red Knot	<i>Calidris canutus rufa</i>	T	No
Whooping Crane	<i>Grus americana</i>	E	Yes (Migratory/Stopover)
Alligator Snapping Turtle	<i>Macrochelys temminckii</i>	PT	No
Austin Blind Salamander	<i>Eurycea waterlooensis</i>	E	No
Barton Springs Salamander	<i>Eurycea sosorum</i>	E	No
Jollyville Plateau Salamander	<i>Eurycea tonkawae</i>	T	No
Balcones Spike	<i>Fusconaia iheringi</i>	E	No
Texas Fatmucket	<i>Lampsilis bracteata</i>	E	No
Coffin Cave Mold Beetle	<i>Batrisodes texanus</i>	E	No
Monarch Butterfly	<i>Danaus plexippus</i>	PT	Yes (Migratory)
Tooth Cave Ground Beetle	<i>Rhadine persephone</i>	E	No
Bee Creek Cave Harvestman	<i>Texella reddelli</i>	E	No
Bone Cave Harvestman	<i>Texella reyesi</i>	E	No
Tooth Cave Spider	<i>Tayshaneta myopica</i>	E	No

Legend: E=Endangered; Proposed Endangered (PE); T=Threatened; Proposed Threatened (PT); Legend for known presence: Yes = Confirmed or likely based on habitat and surveys; No = Habitat not present or species endemic to other regions; Yes (Migratory/Stopover) = Observed seasonally in migration; Yes (Migratory) = Migratory through area but not resident

### *Tricolored Bat*

The Tricolored bat, currently proposed for listing as endangered, is known to roost in forested areas and occasionally in man-made structures on the installation. The 2020 Biological Opinion (BO) incorporates avoidance measures that protect potential maternity roosts during the sensitive May to August season. Tree clearing is seasonally restricted and must be coordinated with Natural Resources staff to prevent inadvertent take. Fort Hood also conducts acoustic monitoring and roost surveys to better understand the species' distribution and habitat use. By limiting habitat disturbance and promoting the use of existing infrastructure during training activities, the installation ensures compliance with ESA Section 7 obligations even in the absence of critical habitat designations.

*Golden-cheeked Warbler*

The golden-cheeked warbler is a small, insectivorous, migratory songbird endemic to the juniper-oak woodlands of central Texas and listed as endangered under the ESA. Recognizable by its distinctive black throat and crown, yellow facial markings, and white underparts, the warbler exhibits strong site fidelity to its breeding habitat, which consists exclusively of mature woodlands characterized by Ashe juniper (*Juniperus ashei*) interspersed with deciduous oaks such as plateau live oak (*Quercus fusiformis*) and Texas oak (*Quercus buckleyi*). The species depends on the bark of mature Ashe juniper for nest construction, making the structural complexity and successional maturity of these woodlands vital to reproductive success.

Fort Hood contains extensive areas of suitable golden-cheeked warbler habitat, particularly in the less-developed portions of the Western Maneuver Area and Live-Fire Zone, where juniper-oak woodlands remain relatively intact. However, not all areas of the installation support viable warbler habitat; previous disturbances related to military training, livestock grazing, and fire suppression have altered woodland structure in some regions. The dynamic nature of habitat quality across the installation necessitates ongoing assessment and adaptive habitat management to sustain the species' breeding potential.

Research and long-term monitoring of the golden-cheeked warbler at Fort Hood have been ongoing since 1991. These efforts have included a variety of techniques, such as point count surveys, distance sampling for density estimation, habitat suitability modeling, and demographic analyses focused on nest success, adult survivorship, and territory fidelity. More recently, the installation has collaborated on geolocator tagging studies to track migration routes and overwintering locations, contributing to broader conservation strategies across the species' range. These data have informed both localized management decisions and regional conservation planning.

In recognition of the potential impacts of ongoing and future military operations, Fort Hood, in collaboration with USFWS, developed a formal BO in August 2020 (USFWS Consultation #02ETAU00-2020-F-0856). The BO evaluated the effects of a broad suite of activities on the golden-cheeked warbler, including live-fire and maneuver training, aviation operations, land management practices, range infrastructure improvements, and prescribed fire. The USFWS concluded that, although incidental take is expected due to habitat loss, degradation, and temporary displacement, the cumulative impact of these actions, when managed appropriately, would not jeopardize the continued existence of the species.

The 2020 BO introduced a robust adaptive management framework as a central component of its conservation strategy. This framework integrates three interdependent performance metrics: (1) habitat availability and spatial distribution, particularly of late-successional juniper-oak forests; (2) golden-cheeked warbler population density, as measured by standardized monitoring protocols; and (3) the rate and spatial extent of training-related disturbances. The BO authorizes incidental take provided that population density remains stable or increasing over a rolling three-year average across the installation. Should population thresholds fall below BO-established benchmarks, or if habitat degradation



exceeds authorized limits, the Army would be required to reinitiate formal consultation with USFWS.

Management practices at Fort Hood are designed to maintain ecological conditions that support the warbler's breeding success while preserving mission readiness. Key conservation measures include spatial and temporal restrictions on training activities during the breeding season (March 1 through August 31), geospatial analysis to delineate high-value habitat, and vegetation management strategies aimed at promoting juniper-oak woodland regeneration. These actions are supported by geospatial decision tools and a structured monitoring program to ensure compliance with the terms of the BO.

In summary, the presence of the golden-cheeked warbler at Fort Hood necessitates a carefully balanced approach to land use management that protects golden-cheeked warbler habitat and supports long-term species viability. The implementation of the 2020 BO's adaptive management provisions provides a science-based mechanism for integrating ESA compliance with ongoing and future military operations.

#### *Piping Plover*

This bird is not known to occur on the installation. The IPaC notes this species concern is only for wind energy considerations. There is no critical habitat overlap with Fort Hood. No management actions are specified in the 2020 BO.

#### *Rufa Red Knot*

This species is a long-distance migratory shorebird unlikely to occur on Fort Hood. It is included in the IPaC list due to broad migratory range but is not addressed in the 2020 BO. There is no habitat within Fort Hood that supports its primary ecological requirements.

#### *Whooping Crane*

The Whooping Crane is not a resident species on Fort Hood but is known to occasionally pass through the region during spring and fall migrations. Although no critical habitat exists on the installation, the BO identifies potential stopover areas in wetlands and ephemeral ponds that may be used for brief rest periods. Fort Hood avoids training-related disturbances in these habitats during peak migration windows and maintains open communication between Natural Resources staff and military units to ensure situational awareness. Riparian and wetland areas are managed under the Integrated Natural Resources Management Plan to maintain ecological function and minimize indirect effects on this iconic migratory species.

#### *Alligator Snapping Turtle*

The Alligator Snapping Turtle, recently proposed for federal listing, has not been documented on Fort Hood; however, suitable perennial water bodies within the installation could provide potential habitat. The BO outlines protective actions, such as requiring military vehicles to use designated stream crossings and avoiding instream activities unless previously coordinated with USFWS. Stream buffers, erosion control measures, and riparian management minimize sedimentation and preserve aquatic habitat quality. These measures would also protect any individuals that may occur in the future, ensuring that ongoing

training and occasional construction activities do not significantly impact the species or trigger the need for formal reinitiation of consultation.

*Austin Blind Salamander*

This species is endemic to the Barton Springs segment of the Edwards Aquifer. It is not present on Fort Hood and there is no habitat overlap.

*Barton Springs Salamander*

This species is similar to the Austin Blind Salamander and is limited to spring habitats in Austin. There are no presence or management concerns on Fort Hood.

*Jollyville Plateau Salamander*

This salamander occurs only in a small area of Travis and Williamson counties. Fort Hood is outside the species' range and it is not addressed in the 2020 BO.

*Balcones Spike*

This freshwater mussel is not known to occur on Fort Hood. The IPaC includes this species due to potential watershed-level effects, but there is no critical habitat overlap. This species is not mentioned in the 2020 BO.

*Texas Fatmucket*

This mussel species has a range primarily in the upper Colorado River basin and there is no known presence or habitat on Fort Hood.

*Coffin Cave Mold Beetle*

This species is endemic to Williamson County, central Texas and cave habitats used by this species are not found on Fort Hood.

*Monarch Butterfly*

While not currently listed, this butterfly is a proposed threatened species that migrates through central Texas, including Fort Hood. The installation supports pollinator habitat conservation by preserving open areas with native milkweed and nectar plants. Vegetation management activities, such as mowing and prescribed burning, are scheduled to avoid peak migration periods in the fall. Additionally, the installation has integrated pollinator education into its outreach programs and minimizes pesticide use in designated conservation areas. These proactive efforts, recognized in both the 2020 BO and 2019 Integrated Natural Resources Management Plan, demonstrate Fort Hood's commitment to mitigating cumulative impacts on the monarch and other pollinators, thus supporting the FONSI determination that military activities do not result in significant environmental harm.

*Tooth Cave Ground Beetle*

This beetle is limited to karst caves in the Austin area. No caves or suitable habitat are found on Fort Hood.

*Bee Creek Cave Harvestman*

This is a karst-obligate invertebrate found only in Travis County and no suitable habitat occurs on Fort Hood.

*Bone Cave Harvestman*

This cave species is not found on Fort Hood due to the lack of appropriate karst habitat.

*Tooth Cave Spider*

This species is endemic to karst features around Austin and Fort Hood does not provide suitable habitat.