

**FINDING OF NO PRACTICABLE ALTERNATIVE  
PROGRAMMATIC ENVIRONMENTAL ASSESSMENT FOR THE FIELDING OF THE  
MANEUVER - SHORT RANGE AIR DEFENSE CAPABILITY**

**Prepared by**

**UNITED STATES ARMY ENVIRONMENTAL COMMAND  
JOINT BASE SAN ANTONIO - FORT SAM HOUSTON**



June 2022

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**DEPARTMENT OF DEFENSE**  
**UNITED STATES ARMY**  
**FINDING OF NO PRACTICABLE ALTERNATIVE**  
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**1.0 Introduction**

Maneuvering formations require air defense capabilities to counter air threats. The Chief of Staff of the Army directed an effort to improve the Air Defense Artillery (ADA) capability to protect the maneuver force and field four battalions of the Maneuver Short-Range Air Defense (M-SHORAD) capability. The M-SHORAD capability and the associated ADA battalions are being activated to provide improved air defense to the maneuver commander. In line with these efforts, the Department of the Army (Army) plans to field<sup>1</sup> M-SHORAD battalions to enhance the defensive capability of divisions against aerial threats.

The Army is assessing six installations: Fort Bliss, Fort Hood, Fort Riley, Fort Stewart, Fort Carson, and Fort Sill. These potential fielding locations meet specific screening criteria to support the M-SHORAD battalion. The Army proposes to implement construction modernization and infrastructure improvement projects identified in the Programmatic Environmental Assessment (PEA) for the Fielding of the M-SHORAD. Of the six installations assessed, Fort Riley and Fort Stewart have potential wetlands or floodplain impacts. The remainder of this Finding addresses just those installations.

The Army determined that elements of the proposed action may be located within portions of the flood plain and wetlands on Fort Riley and Fort Stewart. Under Executive Order (EO) 11988, *Floodplain Management*, as amended by EO 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*; the Army must find that there is no practicable alternative to development within the floodplain. Under EO 11990, *Protection of Wetlands*, federal agencies must avoid undertaking new construction located in wetlands unless the head of the agency finds that there is no practicable alternative to such construction. Further, the Army must take all practicable measures to minimize harm to or within floodplains and wetlands.

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<sup>1</sup> “Field” refers to sending new equipment and technology to installations. As part of the fielding action, Soldiers will be stationed at an installation to train with and maintain the M-SHORAD units and equipment.

This finding incorporates the analysis and conclusions of the May 2021 Programmatic Environmental Assessment for the Fielding of the Maneuver - Short Range Air Defense Capability. This finding along with the PEA were available for public comment, in accordance with both EOs. There were no comments on this finding.

## **2.0 Notice of Floodplain and Wetland Involvement**

EO 11988, as amended by EO 13690, requires federal agencies to determine whether a proposed action would occur within a floodplain and to avoid floodplains to the maximum extent possible when there is a practicable alternative. The floodplain is defined as lowland and relatively flat areas adjoining inland and coastal waters at an elevation established using a method defined in Section 6(c) (1) of the amended EO 11988. The Army has determined that certain facilities and infrastructure proposed in the PEA may necessitate development in the floodplain on Fort Stewart but not on Fort Riley.

EO 11990 requires that each federal agency, to the extent permitted by law, “shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to such construction; and, (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.” The term "wetlands" means “those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction.” The Army has determined that certain facilities and infrastructure proposed in the PEA may necessitate development in wetlands on Fort Riley and Fort Stewart.

At Fort Riley, a training range may be constructed in an area known to contain wetlands but not floodplains. At Fort Stewart, cantonment construction may occur near Mill Creek and range construction may occur near the Canoochee River. Both wetlands and floodplains may be impacted by the construction at Fort Stewart. Development can impact these natural resources via the loss or degradation of their natural functional benefits such as water storage, infiltration, and filtration. These impacts extend to the intrinsic value of these resources or the benefits associated with their use, such as wildlife habitat, recreation, and aesthetic enjoyment. Floodplain and wetland functions and values are also susceptible to changes in the volume, rate, and quality of stormwater discharge, particularly as influenced by the amount of impervious surface within a watershed.

Publication in the Federal Register of the Notice of Availability (NOA) for the PEA and Draft Finding of No Significant Impact (FONSI) commenced a 30-day public review period. The notice also stated that the 30-day public review period applied to this draft Finding of No Practicable Alternative (FONPA). Written comments regarding each of the documents were

accepted from May 19, 2021 until June 18, 2021. No comments addressing the FONPA were received.

### **3.0 Description of the Proposed Action and Discussion of Alternatives**

The proposed action is to field the M-SHORAD battalion to three of the six assessed installations. Fielding may require new or updated facilities and infrastructure to support the battalion.

#### **Alternatives Selection Criteria**

The practicability of a given alternative is evaluated by considering pertinent factors such as community welfare, environmental impact, and feasibility in light of the overall project purpose and need. The Army developed screening criteria to assess whether an alternative would meet its purpose and need and, therefore, could be considered reasonable. These criteria were used to evaluate a range of reasonable alternatives, as follows:

1. Installations must have an Armor Brigade Combat Team (ABCT) or a Stryker Brigade Combat Team (SBCT) present or provide initial training for M-SHORAD-assigned soldiers.
2. Adequate maneuver space is available to support the minimum requirements for the M-SHORAD battalion training as designated in authoritative Army training documents.
3. Adequate live-fire ranges are available to support the minimum requirements for the M-SHORAD crew certification and training as designated in authoritative Army training documents. The training requirements can be met on existing ranges, new ranges under construction or planned, or through selective scheduling as facilitated by the Sustainable Readiness Model or Regionally Aligned Readiness and Modernization Model. In addition, certain live-fire training may be accomplished through appropriate simulations.
4. Adequate protected airspace of lateral and vertical extent. However, institutional training sites will not require the full amount of airspace as student training will provide basic abilities that will be honed at the M-SHORAD battalion.
5. Adequate cantonment facilities for administrative, maintenance, motor pool, housing, and personnel support.

#### **Alternatives Considered and Dismissed**

An alternative not carried forward would have fielded the M-SHORAD capability to installations at which the unit could be accommodated within existing infrastructure and training could be accomplished with minimal constraints on activity, time, and space:

**Activity** – An installation can accommodate 75 percent (three out of four) of the required live-fire training events of the M-SHORAD mounted weapons on the primary range type designated in TC 25-8. This means that one out of four (25 percent) of M-SHORAD weapons systems would require simulation, completion on an alternate range type as designated in TC 25-8, or deployment to another installation to complete required live-fire training.

**Time** – Non-availability, delays, or interruptions of maneuver space or live-fire ranges of no more than 2 weeks per year.

**Space** – Training done in a contiguous area with only existing buffer zones to avoid protected resources.<sup>2</sup>

An initial review of the live-fire range types and capacity at all of the assessed installations showed a lack of primary range types and/or insufficient range capacity to accommodate the additional training requirements of the M-SHORAD. All installations would have required training on alternate range types in excess of 25 percent and/or scheduling changes or delays in excess of two weeks. As noted in the PEA, all installations would use the Sustainable Readiness Model or Regionally Aligned Readiness and Modernization Model to allow the training flexibility to ensure deploying forces were trained and ready to accomplish their assigned missions.

### **Alternatives Subject to Further Analysis**

Based on the selection criteria, a Proposed Action and No Action Alternative were selected for detailed analysis.

#### No Action Alternative

Under the No Action Alternative, the M-SHORAD would not be fielded or stationed at any installation; the Army would continue training per current requirements. This would not meet the objective of the Chief of Staff of the Army and leave Army ABCT and SBCT maneuver units without the desired air defense capability.

#### Proposed Action

To enhance live-fire training, Fort Riley has been planning to construct a new range and has a proposed location approved by the installation's leadership. The M-SHORAD and other systems would complete training events on the new range. The minimum Army standard for this range is greater than 500 acres. All live-fire ranges must be located where the potential dangers from ordnance discharge are contained within controlled, restricted areas linked to an impact area to avoid danger to non-participants. To meet this requirement, Fort Riley intends to construct the new range in an area designated and used for training to the north of the cantonment area and on

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<sup>2</sup> Protected resources include cultural, wetland, migratory birds, and threatened and endangered species.

the northwest side of an impact area. It must be oriented with the range control facilities on the perimeter and all live firing directed into an impact area. Construction of the range would be in an area known to contain wetlands but not floodplains. A review of the National Wetlands Inventory map shows numerous riverine wetlands throughout all areas meeting the safety requirement. No other site meeting the size and orientation requirements of the new range and avoiding wetlands exists on Fort Riley. Therefore, there is no practicable alternative at Fort Riley to use of the proposed site. While the proposed area contains wetlands, construction of the range facilities would be outside of delineated wetlands as much as possible to minimize impacts to the resource.

Fort Stewart has a future stationing capacity build-out plan should new cantonment construction funding become available for M-SHORAD support facilities near 6th Street, 15th Street, and Mill Creek. A review of the National Wetlands Inventory map shows numerous freshwater forested/shrub wetlands surrounding and interspersed throughout the entire cantonment area of Fort Stewart. Also, reviewing the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer map shows floodplains surrounding and interspersed throughout the cantonment area. Avoiding impacts to wetlands and floodplains during construction of facilities to support the M-SHORAD battalion is not practicable. Efforts to avoid and minimize sensitive environmental resources were implemented during the capacity planning process. It is anticipated that additional effort to avoid and minimize impacts would be accomplished through the design process of each garrison facility.

Fort Stewart's live-fire ranges must be sited in locations where the dangers from ordnance discharge are contained within controlled, restricted areas to avoid harm to non-participants. Fort Stewart has identified potential locations to construct two new ranges. The M-SHORAD and other systems would complete training events on the new ranges. All areas at Fort Stewart meeting safety standards and suitable for the construction of live-fire ranges contain a substantial amount of freshwater forested/shrub and freshwater emergent wetlands as depicted in the National Wetlands Inventory. There are also extensive areas of floodplains. Any potential site that meets the required safety standards will impact wetlands or floodplains and avoidance is not practicable at Fort Stewart. Potential construction sites for the two new ranges are in the north-central part of the training area east of Route 119 and south of Highway 280, which lie north of but near the Canoochee River. It is standard practice on Fort Stewart that all proposed range projects are sited to avoid and minimize environmental resource impacts to the greatest extent practicable. The selected locations are required because they would minimize interference with other existing training ranges and maneuver areas.

#### **4.0 Finding**

During development of the PEA, the Army sought ways to site the needed facilities entirely outside of floodplains and wetlands while still addressing the M-SHORAD battalion operational and safety requirements. All available areas for construction of the cantonment and range

facilities at Fort Stewart and range facilities at Fort Riley contain wetlands or floodplains. Due to mission-related factors, such as lack of developable space and compliance with Army facility requirements, it was determined that no practicable alternatives exist that avoid development within floodplains or wetlands on Fort Riley and Fort Stewart.

The Army decision making process to field the M-SHORAD would consider many factors including: strategic and tactical requirements, installation mission and capacity, cost, and the environmental impacts of the action. Fort Riley or Fort Stewart could be determined to be most appropriate for M-SHORAD through this process. Following a thorough evaluation of alternate plans that would satisfy the purpose and need for the Proposed Action, I find that there is no practicable alternative to siting elements of the Proposed Action within wetlands at Fort Riley and floodplains and wetlands at Fort Stewart if they are determined to be the most appropriate location for M-SHORAD. Therefore, the Army will ensure that all practicable measures to minimize impacts to and within the floodplain environment and to minimize harm to wetlands are incorporated into the Proposed Action.

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Date

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Ms. Carla Coulson  
Deputy Assistant Secretary of the Army  
Installations, Housing & Partnerships





**DEPARTMENT OF THE ARMY**  
**OFFICE OF THE DEPUTY CHIEF OF STAFF, G-9**  
**600 ARMY PENTAGON**  
**WASHINGTON, DC 20310-0600**

DAIN-ISE

9 December 2022

MEMORANDUM FOR Deputy Assistant Secretary of the Army for Installations, Housing and Partnerships (DASA-IH&P), 110 Army Pentagon, Washington DC 20310-1001

SUBJECT: Finding of No Practicable Alternative for the Fielding of the Maneuver - Short Range Air Defense Capability (M-SHORAD)

1. Reference:

- a. Executive Order (EO) 11988, Floodplain Management, 24 May 1977
- b. EO 11990, Protection of Wetlands, 24 May 1977
- c. 32 CFR part 651, Environmental Analysis of Army Actions, 29 March 2022

2. Purpose: To obtain DASA (IH&P) approval on the Finding of No Practicable Alternative (FONPA), Enclosure, for the fielding of M-SHORAD.

3. Discussion:

a. IAW reference 1.c., the Army prepared a Programmatic Environmental Assessment for fielding of M-SHORAD. The Army proposed to implement construction modernization and infrastructure improvement projects to support fielding of the M-SHORAD capability. The Army assessed six installations as possible fielding locations: Fort Bliss, Fort Hood, Fort Riley, Fort Stewart, Fort Carson, and Fort Sill. Elements of the proposed action may be located within portions of the flood plain and wetlands on Fort Riley and Fort Stewart.

b. Due to mission-related factors, such as lack of developable space and compliance with Army facility requirements, the Army determined that no practicable alternatives exist that avoid development within floodplains or wetlands on Fort Riley and Fort Stewart.

c. The Army will ensure that all practicable measures to minimize impacts to and within the floodplain environment and to minimize harm to wetlands.

4. Recommendation: IAW references 1.a. and 1.b., approve the FONPA for M-SHORAD fielding at Fort Riley and Fort Stewart request.

SUBJECT: Finding of No Practicable Alternative for the Fielding of the Maneuver - Short Range Air Defense Capability (M-SHORAD)

5. The point of contact for this action is Ms. Andrea Pahlevanpour, (571) 256-9702 or [andrea.pahlevanpour.civ@army.mil](mailto:andrea.pahlevanpour.civ@army.mil).

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Encl

JOSHUA S. DAVIS  
Colonel, EN  
Chief, Army Environmental Division



**DEPARTMENT OF THE ARMY**  
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY  
INSTALLATIONS, ENERGY AND ENVIRONMENT  
110 ARMY PENTAGON  
WASHINGTON, DC 20310-0110

**JAN 18 2023**

SAIE-IHP

**MEMORANDUM FOR**

Deputy Chief of Staff, G-9, DAIN-ISE, 600 Army Pentagon, Washington D.C., 20310-0660

**SUBJECT:** Request for Approval for a Finding of No Practicable Alternative (FONPA) for the Fielding of the Maneuver - Short Range Air Defense Capability (M-SHORAD)

1. Reference DAIN-ISE memorandum, 09 December 2022, Subject: Finding of No Practicable Alternative for the Fielding of the Maneuver - Short Range Air Defense Capability (M-SHORAD).
2. As requested in referenced memorandum, the FONPA for fielding of M-SHORAD at Fort Riley and Fort Stewart is approved.
3. The points of contact for this action are Ms. Denise Faldowski, ODASA (IH&P), at [denise.m.faldowski.civ@army.mil](mailto:denise.m.faldowski.civ@army.mil).

A handwritten signature in black ink, appearing to read "Carla K. Coulson", is positioned above the printed name.

**CARLA K. COULSON**  
Deputy Assistant Secretary of the Army  
(Installations, Housing, and Partnerships)