

**Draft Environmental Assessment and
Draft Finding of No Significant Impact
and Finding of No Practicable Alternative for the
Construction, Operation, and Maintenance
of the FY13 Ranges on
Fort Stewart, Georgia**



Environmental Division,
U.S. Army Garrison, Fort Stewart, Georgia
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**DRAFT ENVIRONMENTAL ASSESSMENT AND
DRAFT FINDING OF NO SIGNIFICANT IMPACT
AND FINDING OF NO PRACTICABLE ALTERNATIVE FOR THE
CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE
FY13 RANGES ON
FORT STEWART, GEORGIA**

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**DRAFT FINDING OF NO SIGNIFICANT IMPACT (FNSI)
AND FINDING OF NO PRACTICABLE ALTERNATIVE (FNPA) FOR THE
CONSTRUCTION, OPERATION, AND MAINTENANCE OF the
FY 13 RANGES ON FORT STEWART, GEORGIA**

1.0 BACKGROUND

Fort Stewart, located in southeastern Georgia, is the largest Army Installation in area east of the Mississippi River. It encompasses nearly 280,000 acres of land located in parts of Liberty, Long, Bryan, Evans, and Tattnall counties. Fort Stewart plays a significant role in supporting the Army's mission and is an invaluable military readiness training platform. The Army's mission is to fight and win the nations wars, respond to national security threats, and promote peace. The Army does this by providing Troops trained, organized, and equipped to provide rapid and sustained military operations, from peacekeeping and security operations to high intensity military conflicts. To support the Army's mission, Fort Stewart must possess the infrastructure and facilities necessary to support the military training occurring there and support the quality of life of the Soldiers and their Families.

This FNSI summarizes the environmental assessment of the potential impacts associated with the construction, operation, and maintenance of the FY13 Ranges on Fort Stewart, Georgia. This consists of a Digital Multi-Purpose Training Range and a Combat Pistol Qualification Course. This document was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S. Code 4321 *et seq.*), the Council on Environmental Quality Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and 32 CFR Part 651 (*Environmental Analysis of Army Actions*).

2.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

The DMPTR and ACPQC construction and operation footprints evaluated in the 2010 EIS were developed using a standard design¹ layout for each range. During the subsequent site-specific design process, it was determined that the ranges could not meet Fort Stewart operational requirements utilizing the standard design, while also avoiding and minimizing wetland impacts. As such, the purpose of the proposed action is to meet these local operational requirements while eliminating unnecessary wetland impacts. Changes proposed to each range footprint are detailed below.

¹ Standard designs for Army ranges are set forth in Training Circular 25-8. These standard designs are developed to ensure specific needs, criteria, and functionality required by the Army is consistently provided. Standard design/criteria are developed to allow limited flexibility to meet the needs of local conditions (AR 415-15).

DMPTR. In the 2010 EIS, the preferred location for this range was on top of the existing Red Cloud Foxtrot Range, within the B9 and B10 training areas. Site-specific design analysis indicated that the 2010 EIS Alternative B location could impact the Strum Bay wetland system, which is being restored to provide wetland impact mitigation in association with the Digital Multipurpose Range Complex construction. This impact was unacceptable, as impacting the Strum Bay wetland system would be a violation of the Clean Water Act, thereby requiring a modification to this range's footprint.

ACPQC. In the 2010 EIS, the preferred location for this range was on Fort Stewart Trail 92 within the D5 training area. Site-specific design analysis determined that the footprint analyzed in the 2010 EIS was too small to accommodate the recently revised (and larger) standard design for the ACPQC's range operations and control area (ROCA) without intruding into wetlands. The range and ROCA could have been accommodated at the site via a footprint modification, if physically separated, with the range on one side of Fort Stewart Trail 92 and the ROCA on the other; however, this was not technically ideal, as the ROCA must be located near the range baseline and the entire range footprint must remain at least 50 meters from roads or tank trails. Therefore, a range resite was deemed prudent.

3.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Alternative I: No Action/Status Quo

DMPTR. Under this alternative, the DMPTR would remain in the original location and site configuration as analyzed in the 2010 EIS and as illustrated in red on Figure 2. The DMPTR would be constructed on top of the existing Red Cloud Foxtrot Range, within the B9 and B10 training areas, with a total site disturbance of 1,005 acres. This alternative utilized the Training Circular (TC) 25-8 standard design, which contains 105 stationary infantry targets (SITs), 35 stationary armor targets) SATs, six moving armor targets (MATs), six moving infantry targets (MITs), four urban target facades, five firing positions per road, one Range Operations Control Area (ROCA) facility, one after action review (AAR) facility, one ammo breakdown area, one operations storage building, one instrumentation loading dock, one general instruction building, and a surfaced staging area. Supporting utilities will tie into existing on-site connections for electrical power and lighting, telecommunications/fiber optic/data/telephone connections will be established via the ongoing Installation Infrastructure Information Management (I3MP) project, septic system, and a well will be established for a potable drinking water supply. Demolition of facilities within the existing range footprint will also occur.

ACPQC. Under this alternative, the ACPQC would remain in the original location and site configuration as analyzed in the 2010 EIS, located along Fort Stewart Trail 92 within the D5 training area, as illustrated in pale blue on Figure 3. This alternative utilized the TC 25-8 standard design (current as of the writing of the 2010 EIS) contained 105 SITs,

15 firing lanes, 15 stationary silhouette targets, Operations Storage Building, Range Operation Center (ROC) Tower, Classroom Building, Covered Mess, Ammo Breakdown Building, and covered bleachers with enclosures. The actual range would be approximately one acre in size. No demolition of existing facilities would occur, as this is a forested, undisturbed site. Supporting utilities will include connections to new overhead power lines for electrical power and lighting, and telecommunications/fiber optic/data/telephone connections via the I3MP, and drilling of a new well for a drinking water supply. No sewer connections will be established, but portable toilets will be supplied by the Installation for use during training events.

Alternative I does not meet the purpose and need for the proposed action; however, it provides a baseline for analysis of the proposed action and its analysis is a requirement of the Council on Environmental Quality for decision-making.

Alternative II: Modified Design

DMPTR. Under this alternative, the Army proposes to shift the DMPTR 100 meters east from its original configuration, as indicated in green on Figure 2. This still positions it on top of the existing Red Cloud Foxtrot Range, but completely avoids the Strum Bay wetlands area. It also decreases the site footprint to 705 acres, by taking the standard design, modifying it to fit the Installation's unique environment, taking into account operational constraints such as topography, line of sight, and environmental constraints (wetland avoidance). This modified design contains 122 SITs, 30 SATs, six MATs, four MITs, eight urban target facades, eight firing positions per road, an urban cluster (seven building façade cluster at which to fire), two trenches, and five camera towers with which to capture the training exercise for use at the AAR. The facilities, supporting utilities, and demolition requirements are the same as under Alternative I.

ACPQC

Under this alternative, the Army proposes to construct and operate the ACPQC at the 2010 EIS Alternative C location, as shown in pale green on Figure 3, utilizing the most current (and larger) TC 25-8 standard design for the ACPQC. The modified design is approximately five acres in size and consists of 12 parallel lanes (around 9 meters wide) with eight SITs per lane, for a total of 96 SIT target emplacements. The target bands are 7 meters (2 side-by-side SITs), 10 meters, 12.5 meters, 16.5 meters, 23 meters, 27 meters and 31 meters. It is located five miles west of the original location on Fort Stewart Trail 92, on its northern side, and avoids wetland impacts within the range footprint. There is a minor potential for wetlands impacts within the utility corridors associated with this alternative, but these may be avoided if the utilities are pole-mounted or installed via underground directional boring. No demolition of existing facilities would occur, as this is a forested, undisturbed site. The facilities, supporting utilities, and demolition

requirements are the same as under Alternative I, with the exception of a new well. Under this alternative, drinking water will be brought on site by each unit utilizing the range, and no well will be established.

This alternative meets the purpose and need for the proposed action.

4.0 SUMMARY OF POTENTIAL ENVIRONMENTAL IMPACTS

Analysis by Fort Stewart’s environmental resource managers determined that some, but not all, of the Installation’s environmental and socioeconomic resources have the potential to be impacted by proposed action and required detailed analysis. These resources included Species of Concern, Cultural Resources, Water Quality (Surface Water, Floodplains, and Wetlands), Solid Waste & Hazardous Materials/Wastes, and Health & Safety. Resources not impacted, or impacted to only a temporary degree, are briefly discussed in Appendix A of the Draft EA. Table 1 presents a summarized representation of these potential impacts, with a detailed analysis presented in Chapter 3.0, Environmental Consequences, of the Draft EA, incorporated herein by reference.

Table 1: Level of Anticipated Environmental Impacts.

| Type of Impact | Alternative I (No Action) DMPTR/ACPQC | Alternative II (Preferred) DMPTR/ACPQC |
|--------------------------------------|---|--|
| Species of Concern | | |
| Direct / Indirect | Negligible/Negligible | Minor/Negligible |
| Cumulative | No | No |
| Cultural Resources | | |
| Direct / Indirect | No Impact/No Impact | Negligible/No Impact |
| Cumulative | No | No |
| Water Quality – Surface Water | | |
| Direct / Indirect | Minor/No Impact | Negligible/Negligible |
| Cumulative | No | No |
| Water Quality - Floodplains | | |
| Direct / Indirect | Minor/Negligible | Negligible/No Impact |
| Cumulative | No | No |
| Water Quality - Wetlands | | |
| Direct / Indirect | Minor/Negligible | Minor/No Impact |

| | | |
|--|-----------------------|-----------------------|
| Cumulative | No | No |
| Solid Waste Management and Disposal | | |
| Direct / Indirect | Negligible/Negligible | Negligible/Negligible |
| Cumulative | No | No |
| Hazardous and Toxic Materials Management and Disposal | | |
| Direct / Indirect | Negligible/Negligible | Negligible/Negligible |
| Cumulative | No | No |
| Public Health and Safety | | |
| Direct / Indirect | Minor/Negligible | Minor/Negligible |
| Cumulative | No | No |

5.0 PUBLIC INVOLVEMENT

The Draft EA, FNSI, and FNPA will be available for a 30-day public review period (October 15 – November 13, 2012) at the local public libraries in Hinesville and Savannah and at the Post Library on Fort Stewart. Fort Stewart will also publish the Notice of Availability of the draft documents in the *Savannah Morning News*, *Coastal Courier*, and *The Frontline* and will mail electronic copies of the document to the regulatory community and joint land use partners with whom it consults.

6.0 CONCLUSION

This Draft EA analyzed the potential impacts of footprint alterations and site location changes for the DMPTR and ACPQC at Fort Stewart, Georgia and is tiered off the 2010 *Fort Stewart Environmental Impact Statement for Training Range and Garrison Support Facilities Construction and Operation*, which analyzed the original footprints and site locations for these projects. Following an analysis and comparison of impacts of the proposed action and no action alternatives, it was determined that neither will result in significant impacts, and the preparation of a Finding of No Significant Impact and Finding of No Practicable Alternative are appropriate. The Army will therefore proceed with the preparation of both for this action.

Date: _____

 KEVIN F. GREGORY
 Colonel, US Army
 Commanding

ACRONYMS

| | |
|-------|---|
| ACPQC | Automated Combat Pistol Qualification Course |
| AR | Army Regulation |
| BA | Biological Assessment |
| BO | Biological Opinion |
| BMPs | Best Management Practices |
| CEQ | Council on Environmental Quality |
| CFR | Code of Federal Regulations |
| CWA | Clean Water Act |
| DA | Department of the Army |
| DMPTR | Digital Multi-Purpose Training Range |
| DPTMS | Directorate of Plans, Training, Mobilization, and Security |
| EA | Environmental Assessment |
| EIS | Environmental Impact Statement |
| EISA | Energy Independence Security Act |
| EOD | Explosive Ordnance Disposal |
| ESA | Endangered Species Act |
| ESCA | Erosion and Sedimentation Control Act |
| ESPCP | Erosion Sedimentation Pollution Control Plan |
| EO | Executive Order |
| FNPA | Finding of No Practicable Alternative |
| FNSI | Finding of No Significant Impact |

| | |
|--------|---|
| GA DNR | Georgia Department of Natural Resources |
| GA EPD | Georgia Environmental Protection Division |
| GIS | Geographic Information System |
| ICRMP | Integrated Cultural Resources Management Plan |
| INRMP | Integrated Natural Resources Management Plan |
| ITAM | Integrated Training Area Management |
| LID | Low Impact Development |
| MS4 | Municipal Separate Storm Sewer Systems |
| NEPA | National Environmental Policy Act |
| NOI | Notice of Intent |
| NPDES | National Pollutant Discharge Elimination System |
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| OSHA | Occupational Safety and Health Administration Act |
| H&S | Health and Safety |
| PPRFFA | Past, Present, and Reasonably Foreseeable Future Actions |
| RCRA | Resource Conservation and Recovery Act |
| ROD | Record of Decision |
| ROW | Right of Way |
| ROI | Region of Influence |
| SBV | Stream Buffer Variance |
| SDZ | Safety Danger Zone |

| | |
|-------|---|
| SPCC | Spill Prevention Control and Countermeasure |
| SHPO | State Historic Preservation Office |
| SWP3 | Stormwater Pollution Prevention Plan |
| TLS | Threshold Level of Significance |
| USFWS | United States Fish and Wildlife Service |
| UXO | Unexploded Ordnance |
| WQA | Water Quality Act |

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1.0 INTRODUCTION AND BACKGROUND

In July 2010, the Army published the *Final Environmental Impact Statement (EIS) for Training Range and Garrison Support Facilities Construction and Operation, Fort Stewart, Georgia* (hereafter, 2010 EIS), which programmatically analyzed impacts from the construction, operation, and maintenance of 12 range facilities and two garrison support facilities on Fort Stewart, Georgia (Figure 1). The Record of Decision (ROD) for the EIS was published in September 2010, documenting the Army's decision to implement the preferred alternative: to construct at the Alternative B locations for each project analyzed, with specific environmental mitigation measures included as a part of that decision.

Considering the programmatic nature of the 2010 EIS, it was determined probable that, as the ranges underwent future detailed design processes, site-specific supplemental NEPA analysis may be required to ascertain the adequacy of the analysis conducted in the 2010 EIS, which was based on the Army's standard design for each range. Recently, two ranges have undergone this process, the Digital Multipurpose Training Range (DMPTR) and the Automated Combat Pistol Qualification Course (ACPQC). Modification to the designs analyzed in the 2010 EIS sought to capture changes in standard designs developed since 2010, local operational requirements, and avoid/minimize environmental impacts, with wetlands avoidance being a primary goal, as discussed briefly below.

DMPTR. In the 2010 EIS, the preferred location for this range was on top of the existing Red Cloud Foxtrot Range, within the B9 and B10 training areas. Site-specific design analysis indicated that the 2010 EIS Alternative B location could impact the Strum Bay wetland system, which is being restored to provide wetland impact mitigation in association with the Digital Multipurpose Range Complex construction. This impact was unacceptable, as impacting the Strum Bay wetland system would be a violation of the Clean Water Act, thereby requiring a modification to this range's footprint.

ACPQC. In the 2010 EIS, the preferred location for this range was on Fort Stewart Trail 92 within the D5 training area. Site-specific design analysis determined that the footprint analyzed in the 2010 EIS was too small to accommodate the recently revised (and larger) standard design for the ACPQC's range operations and control area (ROCA) without intruding into wetlands. The range and ROCA could have been accommodated at the site via a footprint modification, if physically separated, with the range on one side of Fort Stewart Trail 92 and the ROCA on the other; however, this was not technically ideal, as the ROCA must be located near the range baseline and the entire range footprint must remain at least 50 meters from roads or tank trails. Therefore, a range resite was deemed prudent.

In accordance with the National Environmental Policy Act and 32 CFR 651.5(g)(1)(i), this Environmental Assessment documents the Army's sufficiency examination of the environmental analyses presented in the 2010 EIS in light of changes associated with the proposed action.

1.1 PURPOSE AND NEED FOR THE PROPOSED ACTION

The DMPTR and ACPQC construction and operation footprints evaluated in the 2010 EIS were developed using a standard design² layout for each range. During the subsequent site-specific design process, it was determined that the ranges could not meet Fort Stewart operational requirements utilizing the standard design, while also avoiding and minimizing wetland impacts. As such, the purpose of the proposed action is to meet these local operational requirements while eliminating unnecessary wetland impacts.

² Standard designs for Army ranges are set forth in Training Circular 25-8. These standard designs are developed to ensure specific needs, criteria, and functionality required by the Army is consistently provided. Standard design/criteria are developed to allow limited flexibility to meet the needs of local conditions (AR 415-15).

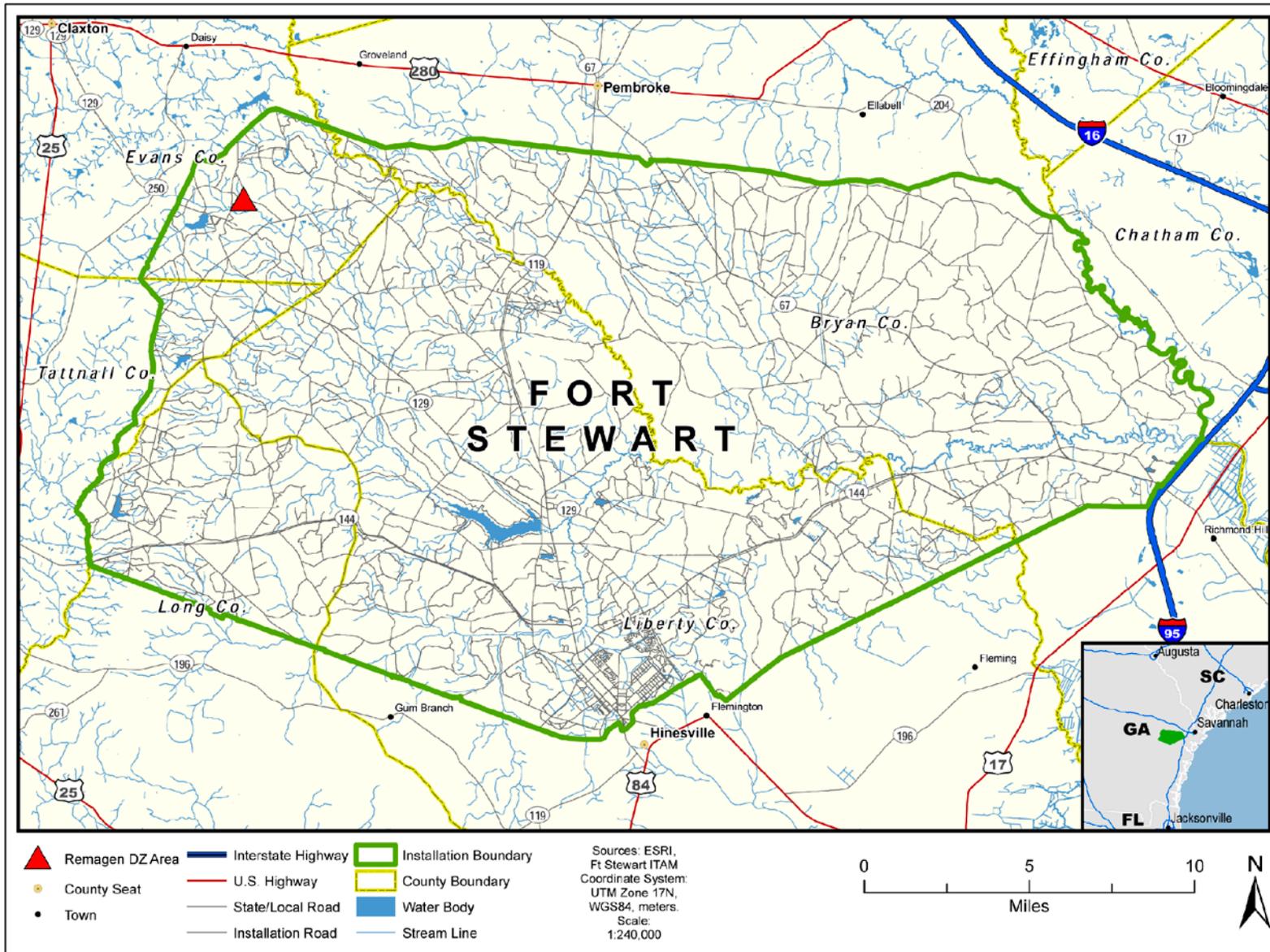


Figure 1: Regional Location of Fort Stewart, Georgia.

2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

Fort Stewart utilized its master planning process to develop alternative courses of action when the design analyzed in the 2010 EIS was determined not operationally and/or environmentally feasible for the DMPTR and ACPQC. This collaborative effort between the Installation's Master Planning Division, Engineering Branch, Range Control Division, and Environmental Division collected and evaluated project-specific information, including mission requirements, to develop a modification for each range that would meet its purpose and need and be operationally and environmentally feasible.

2.2 Alternative I: No Action/Status Quo

DMPTR. Under this alternative, the DMPTR would remain in the original location and site configuration as analyzed in the 2010 EIS and as illustrated in red on Figure 2. The DMPTR would be constructed on top of the existing Red Cloud Foxtrot Range, within the B9 and B10 training areas, with a total site disturbance of 1,005 acres. This alternative utilized the Training Circular (TC) 25-8 standard design, which contains 105 stationary infantry targets (SITs), 35 stationary armor targets) SATs, six moving armor targets (MATs), six moving infantry targets (MITs), four urban target facades, five firing positions per road, one Range Operations Control Area (ROCA) facility, one after action review (AAR) facility, one ammo breakdown area, one operations storage building, one instrumentation loading dock, one general instruction building, and a surfaced staging area. Supporting utilities will tie into existing on-site connections for electrical power and lighting, telecommunications/fiber optic/data/telephone connections will be established via the ongoing Installation Infrastructure Information Management (I3MP) project, septic system, and a well will be established for a potable drinking water supply. Demolition of facilities within the existing range footprint will also occur.

ACPQC. Under this alternative, the ACPQC would remain in the original location and site configuration as analyzed in the 2010 EIS, located along Fort Stewart Trail 92 within the D5 training area, as illustrated in pale blue on Figure 3. This alternative utilized the TC 25-8 standard design (current as of the writing of the 2010 EIS) contained 105 SITs, 15 firing lanes, 15 stationary silhouette targets, Operations Storage Building, Range Operation Center (ROC) Tower, Classroom Building, Covered Mess, Ammo Breakdown Building, and covered bleachers with enclosures. The actual range would be approximately one acre in size. No demolition of existing facilities would occur, as this is a forested, undisturbed site. Supporting utilities will include connections to new overhead power lines for electrical power and lighting, and telecommunications/fiber optic/data/telephone connections via the I3MP, and drilling of a new a well for a drinking water supply. No sewer connections will be established, but portable toilets will be supplied by the Installation for use during training events.

Alternative I does not meet the purpose and need for the proposed action; however, it provides a baseline for analysis of the proposed action and its analysis is a requirement of the Council on Environmental Quality for decision-making.

2.3 Alternative II: Modified Design

DMPTR. Under this alternative, the Army proposes to shift the DMPTR 100 meters east from its original configuration, as indicated in green on Figure 2. This still positions it on top of the existing Red Cloud Foxtrot Range, but completely avoids the Strum Bay wetlands area. It also decreases the site footprint to 705 acres, by taking the standard design, modifying it to fit the Installation's unique environment, taking into account operational constraints such as topography, line of sight, and environmental constraints (wetland avoidance). This modified design contains 122 SITs, 30 SATs, six MATs, four MITs, eight urban target facades, eight firing positions per road, an urban cluster (seven building façade cluster at which to fire), two trenches, and five camera towers with which to capture the training exercise for use at the AAR. The facilities, supporting utilities, and demolition requirements are the same as under Alternative I.

ACPQC (Figure 3)

Under this alternative, the Army proposes to construct and operate the ACPQC at the 2010 EIS Alternative C location, as shown in pale green on Figure 3, utilizing the most current (and larger) TC 25-8 standard design for the ACPQC. The modified design is approximately five acres in size and consists of 12 parallel lanes (around 9 meters wide) with eight SITs per lane, for a total of 96 SIT target emplacements. The target bands are 7 meters (2 side-by-side SITs), 10 meters, 12.5 meters, 16.5 meters, 23 meters, 27 meters and 31 meters. It is located five miles west of the original location on Fort Stewart Trail 92, on its northern side, and avoids wetland impacts within the range footprint. There is a minor potential for wetlands impacts within the utility corridors associated with this alternative, but these may be avoided if the utilities are pole-mounted or installed via underground directional boring. No demolition of existing facilities would occur, as this is a forested, undisturbed site. The facilities, supporting utilities, and demolition requirements are the same as under Alternative I, with the exception of a new well. Under this alternative, drinking water will be brought on site by each unit utilizing the range, and no well will be established.

This alternative meets the purpose and need for the proposed action.

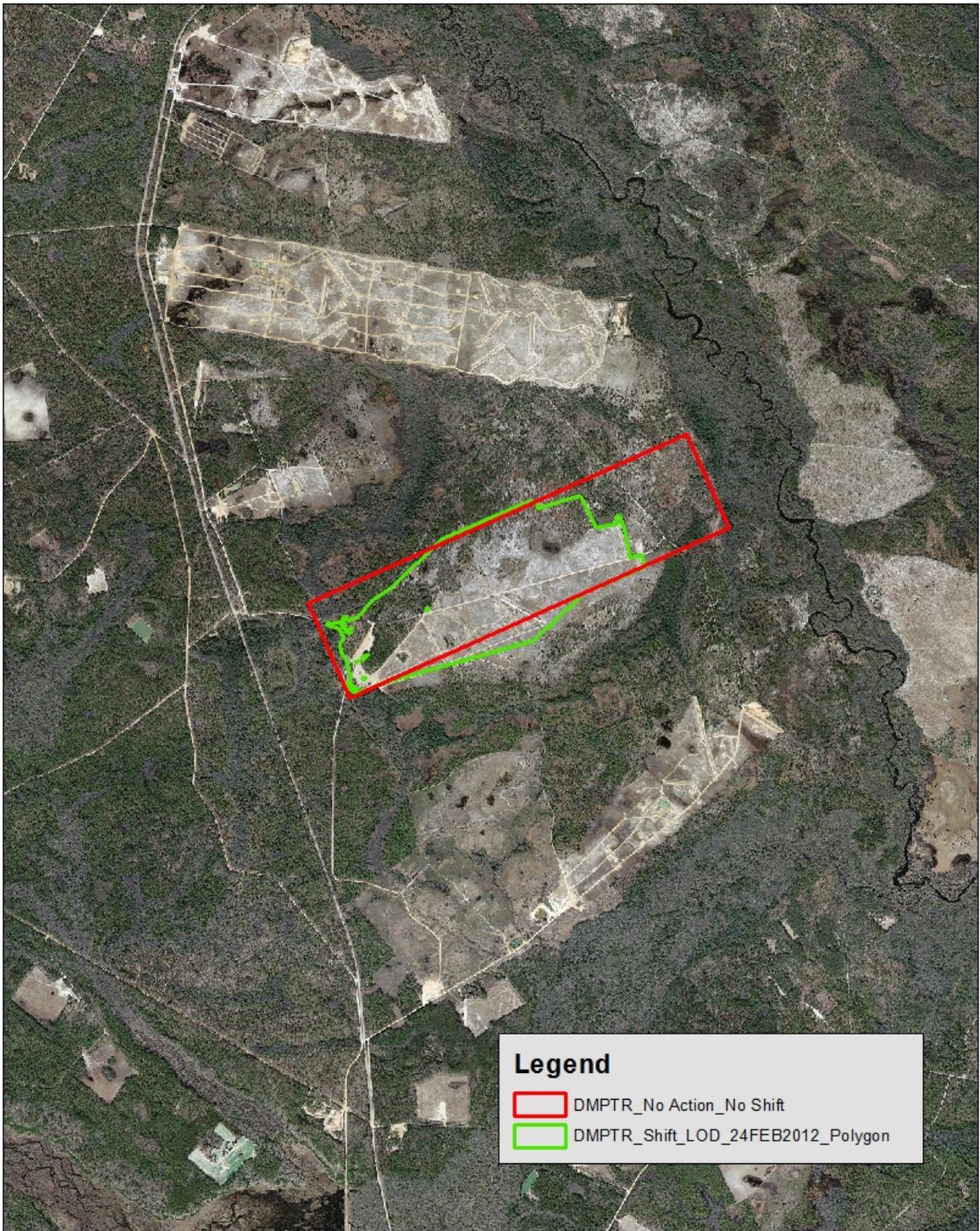


Figure 2: DMPTR Alternative Locations



Figure 3: ACPQC Alternative Locations

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION

This Environmental Assessment (EA) tiers off the “*Final Environmental Impact Statement for the Training Ranges and Garrison Support Facilities Construction and Operation, Fort Stewart, Georgia,*” and its Record of Decision (hereafter, Fort Stewart EIS and ROD); therefore, the majority of the information presented in this section is summarized. For a detailed affected environment discussion, refer to Chapter 3 of the Fort Stewart EIS, a copy of which is at the following web address: http://www.stewart.army.mil/dpw/EN_Downloads.asp, or the same chapter from any of the Installation’s recent EAs. Chapter 3 of this Draft Environmental Assessment (EA) focuses on only those sections of the existing environment potentially impacted by the proposed action (the construction and operation of the DMPTR and ACPQC) either directly/indirectly and/or cumulatively. The environmental resources on Fort Stewart to which no potential effects were predicted, such as Air Quality, Socioeconomics, and others, are briefly discussed in Appendix A of this document, *Environmental Resources Eliminated from Further Review*.

The Draft EA specifically analyzed impacts on the following resources; species of concern, cultural resources, water resources, solid and hazardous materials/wastes, and health and safety. The chapter is organized by individual resources and each resource includes a separate section for ‘Affected Environment’ and ‘Environmental Consequences’. The Affected Environment describes the resource as it currently exists as well as applicable laws and regulations regarding the protection of the resource. The Environmental Consequences describes the potential adverse and beneficial environmental impacts that would result from the proposed action and no action alternatives. Adverse impacts are described as direct, indirect, or cumulative, as defined below.

Direct impacts “... are caused by the action and occur at the same time and place.”

Indirect impacts “are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.”

Cumulative impacts are “...the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions.” (40 Code of Federal Regulations (CFR) 1508)

Cumulative impacts may result when impacts from an alternative are added to the impact of other actions. In accordance with the Council on Environmental Quality’s (CEQ) National Environmental Policy Act (NEPA) guidance, an analysis of cumulative effects must focus on “truly meaningful effects” examples of which include: habitat loss or fragmentation; diminished

flood control capacity or other reductions in wetland values; degradation of sensitive ecosystems such as old growth forest; fragmentation of historic districts; and hazardous materials management (President's, CEQ 1997).

The cumulative impact analysis provided in each of the resource sections includes the past, present, and reasonably foreseeable future actions (PPRFFA) in the vicinity of the Digital Multi-Purpose Training Range (DMPTR) and the Automated Combat Pistol Qualification Course (ACPQC). Past actions in the vicinity of the ACPQC alternatives include the development of the cantonment area to the west and the surrounding Fort Stewart trail network, including Trail 92, on which both of the alternatives lie; past actions in the vicinity of the DMPTR include the development of the Red Cloud Range Complex, the predominant feature in this part of the Installation. Present actions in the vicinity of the ACPQC include the recent build-out of the 2nd Brigade Combat Team Complex, continuous and ongoing maintenance activities and operations at Small Arms Range November to the east, and rural activities of off-Post residents to the west. The ACPQC is also not far from the westernmost edge of the cantonment area, where routine day-to-day operations and residential functions would occur. Present actions in the vicinity of the DMPTR alternatives include continuous and ongoing maintenance activities and operations at the newly-constructed DMPPRC and other, smaller ranges to the south and Red Cloud Echo, Bravo, and Alpha to the north. Reasonably foreseeable actions include the construction of a Multi-Purpose Machine Gun (MPMG) Range in Training Areas (TAs) D7/D8/D11 and Qualification Training Range (QTR) in TA D7 (not far from the ACPQC) and the Modified Record Fire (MRF) Range in TA B4 (near the DMPTR). The region of influence for the analysis in this Draft EA lies within the Installation boundary.

3.2 SPECIES OF CONCERN

3.2.1 INTRODUCTION

During preparation of the 2010 EIS, Fort Stewart consulted with the U.S. Fish and Wildlife Service (USFWS) and received a non-jeopardy biological opinion (BO) that included the areas for both alternative locations of the DMPTR and ACPQC. Potential impacts to the Red-cockaded woodpecker (RCW), the Frosted Flatwood Salamander (FFS), and the Indigo Snake may occur as a result of implementing the DMPTR and ACPQC Alternatives I and II; therefore, they are the only species discussed in detail below.

Wildlife and Migratory Birds are not discussed in detail in this section, as impacts would be temporary under both alternatives, with the species flushing from the area during construction and operation, and returning to the area once human activities cease. Unless otherwise indicated, the basis for the information in Section 3.2 is from the Installation's Integrated Natural Resource Management Plan (INRMP), the "2007 Management Guidelines for the Red-Cockaded

Woodpecker on Army Installations,” and Army Regulation (AR) 200-1, “Environmental Protection and Enhancement.”

3.2.2 AFFECTED ENVIRONMENT

Species of concern are defined as those listed by the USFWS as endangered or threatened under the Endangered Species Act (ESA); listed by Georgia’s Department of Natural Resources (DNR) as rare, unusual, endangered, or threatened; designated as a special species of concern by the Georgia Natural Heritage Program; or proposed for listing by the DNR or USFWS. Management of these species on Fort Stewart is accomplished via the Installation’s INRMP. The eight Federal faunal species listed or proposed for listing by the ESA are:

- Red-cockaded woodpecker,
- Eastern indigo snake,
- Frosted flatwoods salamander,
- Wood stork,
- Shortnose sturgeon
- Atlantic Sturgeon
- Gopher tortoise (state of Georgia candidate species)
- Striped Newt (state of Georgia candidate species)

The project footprint does not lie within habitat for any of these federally or state protected species and is therefore not expected to affect them.

RCW. The RCW is listed by the USFWS and state of Georgia as endangered. Before any land-disturbing activity, the area is 100% surveyed for any RCW cavity trees and foraging areas. As of 2012, Fort Stewart supports a healthy, active RCW population and has reached its recovery goal of 350 potential breeding groups in 2012.

FFS. The USFWS and the state of Georgia list the FFS as threatened. Terrestrial adult FFS inhabit low areas in pine flatwoods, where they live in underground burrows that they excavate or in crayfish tunnels. The FFS have been found more than one mile from their breeding ponds; however, a protective buffer of 492 yards from the wetland edge is a recommended by USFWS and used by Fort Stewart. The conservation goal is to maintain the five existing populations of FFS and 25 breeding sites currently known on Fort Stewart.

Eastern Indigo Snake. The eastern indigo snake is listed by USFWS and the state of Georgia as threatened. The primary habitat of the eastern indigo snake is upland communities interspersed with wetland habitats, such as drainage ways, river swamps, and cypress ponds. The conservation goal for the eastern indigo snake is to maintain the four populations on Fort Stewart and to encourage expansion into suitable unoccupied habitat.

3.2.3 ENVIRONMENTAL CONSEQUENCES

3.2.3.1 Alternative I: No Action/Status Quo

DMPTR. The construction, operation, and maintenance of this range will impact 22.4 acres of RCW-suitable habitat. The project footprint is within eastern indigo snake and FFS habitat, but will not adversely affect its habitat or hinder the Installation in their conservation goals for these species. As such, this alternative will have negligible impacts to species of concern.

ACPQC. The construction, operation, and maintenance of this range will impact 4.0 acres of existing RCW habitat. The project footprint lies within FFS habitat, but none were detected during a survey for this species and the action will not impact any FFS ponds or their associated buffers. The proposed action will not hinder the Installation in their conservation goals for these species.

Overall, this alternative represents no change from the analysis of these ranges in the 2010 Biological Assessment (BA) and its resulting Biological Opinion (BO) from the USFWS and will have negligible adverse impacts species of concern.

Cumulative Impacts. No significant or potentially significant cumulative impacts to species of concern will occur from implementation of the No Action Alternative in conjunction with the PPRFFAs outlined in Section 3.1. Consultation with the USFWS is complete for this DMPTR alternative, as well as for the pending future ranges, for which no significant impact was predicted. Implementation of guidance provided in the activity-specific ESPC Plan and SWP3, Endangered Species Management Plans, and INRMP will continue, and Installation personnel will continue to survey and monitor habitat for sensitive species following completion of the range and its activation. Minimization measures, as well as any reasonable and prudent measures required by the 2010 BO issued by the USFWS in association with the 2010 EIS, should be followed to ensure this finding.

3.2.3.2 Alternative II: Modified Design

DMPTR

The construction, operation, and maintenance of the DMPTR at this location will result in an impact to 31.0 acres of RCW habitat. Although the footprint for this alternative location was shifted to avoid wetlands, it is still within the boundary of the area analyzed in the 2010 BA/BO; therefore, a modified BA and renewed consultation with the USFWS was not required. No RCW cavities lie within the revised project footprint, although a portion of it does fall within one active RCW foraging partition. However, this will not adversely affect the RCW due to construction of the DMPTR in this revised configuration.

The entire project footprint lies within eastern indigo snake habitat and there have been five sightings of the species within it. A portion of this project footprint also lies within gopher tortoise habitat that the snakes may use for winter refuge. A portion of the project footprint lies within FFS habitat, but will not affect any known breeding ponds or their associated buffers, none have been sighted in the area, and is not likely to adversely affect the FFS. This will not hinder the Installation in their conservation goals for any of these species and will have negligible effects to species of concern. Overall, the construction, operations, and maintenance of the DMPTR at this location will result in minor adverse impacts to species of concern

ACPQC

The construction, operation, and maintenance of this range will result in the removal of 12.3 acres of RCW habitat, which is insufficient to result in a finding of likely to adversely affect this species. The Installation prepared a new BA to account for moving the ACPQC five miles to the west for wetlands avoidance. The USFWS issued their concurrence with the Installation's finding of no adverse effect on March 6, 2012 (Appendix B). As a protective/preventive measure for future operations at the ACPQC, a berm will be constructed to provide down-range protection for RCW habitat and trees making up RCW Clusters 211 (inactive) and 214 (active). The Installation prepared and submitted a BA Modification for the timber harvest, RCW habitat removal, and construction of a utility corridor to support the ACPQC (specific to this alternative) and submitted it to the USFWS on May 12, 2012. The USFWS issued their concurrence with the Installation's findings of no adverse impacts on July 30, 2012 (Appendix B). Overall, the construction, operations, and maintenance of the ACPQC at this location will result in negligible adverse impacts to species of concern.

Cumulative Impacts. No significant or potentially significant cumulative impacts to species of concern will occur from implementation of Alternative II in conjunction with the PPRFFAs outlined in Section 3.1. Consultation with the USFWS is complete for the DMPTR and ACPQC, under both alternatives, as well as for the pending future ranges, for which no significant impact was predicted. As the pending ranges undergo the site-specific design process, they will receive supplemental NEPA and other required environmental analyses, as with the DMPTR and ACPQC. Adherence to Installation ESMPs, the INRMP, and other applicable guidance will be required and monitoring efforts must continue to be implemented, as discussed under Alternative I. Minimization measures, as well as any reasonable and prudent measures required by the 2010 BO for the DMPTR, 2012 Modification BO for the ACPQC, and future BOs, if issued, should be followed to maintain the findings of no affect.

3.3 CULTURAL RESOURCES

3.3.1 INTRODUCTION

Fort Stewart consulted with the Georgia State Historic Preservation Office (SHPO) and other interested parties on this overall action in conjunction with the 2010 EIS. Additional consultation is currently in progress with the SHPO for the footprint alteration for the DMPTR and change in preferred alternative for the ACPQC; copies of this consultation are included in Appendix C. The attachments to the consultation letters contain sensitive information on archaeological sites and are neither in this Draft EA nor distributed to the public in accordance with Section 9 of the Archaeological Resource Protection Act and Section 304 of the National Preservation Act.

3.3.2 AFFECTED ENVIRONMENT

Cultural resources consist of prehistoric and historic districts, sites, structures, artifacts, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. The affected environment includes any cultural resources eligible or potentially eligible for inclusion in the National Register of Historic Places (NRHP) identified within the proposed footprint.

The Installation's Integrated Cultural Resources Management Plan (ICRMP) incorporates cultural resource laws and regulations into an internal document outlining how Fort Stewart manages its cultural resources. Fort Stewart and the Georgia State Historic Preservation Office (SHPO) developed a Programmatic Agreement (PA) in September 2000, which it renewed in 2005 and 2010. It provides Fort Stewart with a flexible tool to manage its cultural resources, meeting the requirements of cultural resource review of undertakings with no effect or no adverse effect without waiting for the 30-day response from the SHPO. In short, the PA is the cultural resource program's regulatory backbone, guiding and streamlining the program's compliance with Federal laws and regulations while providing a timely, effective method of managing Fort Stewart's cultural resources.

3.3.3 ENVIRONMENTAL CONSEQUENCES

3.3.3.1 Alternative I: No Action Alternative

DMPTR

Under this alternative, the construction, operations, and maintenance of this range will impact portions of TAs B9 and B10, all of which have been surveyed for cultural resources (Ross 2004a; Cain et al. 2005, 2009 Morehead et al. 2008b). The existing range floor is excluded from survey in accordance with the CRM-specific categorical exclusion of survey requirements for previously disturbed special use facilities (including range floors), per the terms of the Installation's PA with the Georgia SHPO. Twelve archaeological sites were identified within the proposed footprint, all determined ineligible for the NRHP, as were all existing buildings/structures within the viewshed of the proposed range (Fortune and Maggioni, 2002).

Although areas in proximity to the proposed footprint have not been fully evaluated for archaeological resources, adjacent training lands have consistently shown a predominantly low potential for cultural resources. Consultation regarding this alternative and its findings with the GA SHPO is complete and part of the 2010 EIS. Overall, the construction, operations, and maintenance of the DMPTR at this location will result in no impacts to cultural resources.

ACPQC

Under this alternative, the construction, operations, and maintenance of this range will impact portions of TA D5, which has been surveyed for cultural resources (Greer et al. 2010). None were found, however, and no impacts to historic properties are anticipated. As with the DMPTR, not all areas in proximity to the ACPQC footprint have been fully evaluated, but adjacent training lands have a predominantly low potential for cultural resources. Consultation regarding this alternative is also complete and part of the 2010 EIS. Overall, the construction, operations, and maintenance of the ACPQC at this location will result in no impacts to cultural resources.

Cumulative Impacts. No significant or potentially significant cumulative impacts to cultural resources will occur from implementation of Alternative I in conjunction with the PPRFFAs outlined in Section 3.1, all of which have had surveys completed and at which no sites eligible for listing on the NRHP were found. If artifacts or human remains are uncovered/encountered during implementation of these projects, personnel working these projects will be informed on Installation protocols to cease work, contact the applicable authorities, and implement Installation Standard Operating Procedures regarding Accidental Discovery of Archeological Deposits and/or Human Remains.

3.3.2 Alternative II: Modified Design

DMPTR

Under this alternative, the construction, operations, and maintenance of this range will impact portions of TAs B9 and B10, although to a lesser degree as under Alternative I, due to the decreased size of the range footprint. This determination is based on both previous surveys for cultural resources (Ross 2004a; Cain et al. 2005, 2009 Morehead et al. 2008b) and surveys recently conducted to account for the 100 meter shift to avoid wetlands (Greer et al. 2012). The existing range floor was excluded from survey, in accordance with the Installation's PA with the Georgia SHPO. Seven new archaeological sites were identified within the revised footprint, all determined ineligible for the NRHP, as have all existing buildings/structures within the viewshed of the proposed range (Fortune and Maggioni, 2002).

The utility corridor for the DMPTR will extend along a portion of GA Highway 119 and contained within the existing, previously disturbed right of way (ROW), also categorically excluded from survey under the Installation's PA with the GA SHPO. The eligible site of Willie

(9LI312) is located adjacent to this ROW; however, this historic property's site boundary does not extend into the area of potential effect for the range. Thomas Hill Cemetery (9LI1591) is located within the DMPTR's Safety Danger Zone (SDZ), once operational, and will coincide with the existing Red Cloud Foxtrot SDZ. A protective berm is already in place around Thomas Hill Cemetery and no new impacts from the DMPTR, once operational, are anticipated. Fort Stewart CRM personnel routinely monitor this cemetery for potential impacts from Red Cloud Foxtrot, and will add the assessment of any new impacts from operations of the DMPTR to their monitoring. Overall, the construction, operations, and maintenance of the DMPTR at this location will result in negligible adverse impacts to cultural resources.

ACPQC

Under this alternative, the construction, operations, and maintenance of this range will impact portions of TA D5, which was surveyed by Fort Stewart CRM personnel during FY 2010 (Greer et al. 2010), which determined that no archaeological resources or buildings would be affected by the construction of the ACPQC at this location. The utility corridor along Fort Stewart Road 92 will be contained within the existing, previously disturbed ROW, categorically excluded by the Installation's PA, as previously discussed. Overall, the construction, operations, and maintenance of the ACPQC at this location will result in no impacts to cultural resources.

Consultation regarding the construction of the DMPTR and the ACPQC at the Alternative II locations is complete, a copy of which is available at Appendix C.

Cumulative Impacts. No significant or potentially significant cumulative impacts to cultural resources will occur from implementation of Alternative II in conjunction with the PPRFFAs outlined in Section 3.1, all of which have had surveys completed and at which no sites eligible for listing on the NRHP were found. As with the No Action Alternative, if archaeological resources and/or human remains are found, personnel working these projects will be informed on Installation protocols to cease work, contact the applicable authorities, and implement Installation SOPs regarding Accidental Discovery of Archeological Deposits and/or Human Remains.

3.4 WATER RESOURCES

3.4.1 INTRODUCTION

The Draft EA's analysis of water quality focuses on the physical, chemical, and biological characteristics of surface waters. Physical characteristics include turbidity, pH, temperature, and total suspended and dissolved solids. Chemical characteristics include dissolved oxygen, nitrate, orthophosphates, and pesticides, while aquatic life forms are used to measure biological characteristics.

3.4.2 AFFECTED ENVIRONMENT

Surface Water. The Fort Stewart INRMP identifies 1,454 acres of ponds, reservoirs, and borrow pits (that regularly fill with water), 265 miles of freshwater rivers and streams, and an additional 12 miles of brackish water streams on Post (Fort Stewart, 2005). Although Fort Stewart occupies parts of four watersheds, the majority of the Installation lies within the Canoochee Watershed and the Ogeechee Coastal Watershed. The Canoochee River crosses the Installation from its northwest corner to its eastern side, and the Ogeechee River forms the Installation's northeastern border (Figure 3-1). The Ogeechee River is not in the vicinity of the proposed action, which is located in the southern portion of the Installation, and will not experience any direct and/or indirect impacts from the proposed action. Therefore, the focus of the discussion below is on the Canoochee River and its tributaries.

The Canoochee River has several tributaries on-Post, most notably Taylor's Creek, which is also the closest tributary to the three alternatives. Taylor's Creek divides into even smaller tributaries that flow from the western and southern portions of the Installation before reconnecting with the Canoochee River and flowing off-Post into the Canoochee watershed. Both the Canoochee River and Taylor's Creek are designated Clean Water Act (CWA) Section 303(d) surface waters, also called "impaired streams" by the Georgia Environmental Protection Division (GA EPD). The GA EPD listed a segment of Taylor's Creek as impaired for fecal coliform, most likely due to off-Post septic systems and on/off-Post wildlife sources. An additional segment of Taylor's Creek, specifically where Mill Creek and Canoochee Creek connect into it, is listed as impaired for low dissolved oxygen (DO) levels, attributed to siltation and sediment loads discharging into the stream during rain events.

The majority of the surface waters within Fort Stewart are "black water systems" which have naturally occurring low DO levels during dry weather periods, as a result of low or no flow conditions. In addition, the GA EPD recently issued fish consumption warnings for two segments of the Canoochee River. The latter was due to high mercury concentrations and was determined by GA EPD to be caused by urban runoff. Fort Stewart actively monitors the tributaries of Taylors Creek, performing post-rain visual assessments, collecting samples from automated samplers, and performing annual in-stream water quality monitoring during non-rain events for DO levels, as required under Fort Stewart's existing Municipal Separate Storm Sewer Systems (MS4) and National Pollutant Discharge Elimination System (NPDES) permits.

Floodplains. The Federal Emergency Management Agency defines the 100-year Floodplain as an area subject to a 1% or greater chance of flooding in any given year, and the 500-year Floodplain as an area subject to a 0.2% or greater chance of flooding in any given year. Floodplains are low-lying lands subject to inundation from floodwaters, are a link to adjacent streams and rivers, and serve various functions, including water storage and conveyance, filtration of nutrients and other pollutants from runoff, erosion control, groundwater recharge,

fish and wildlife habitat, and recreation. Approximately 120,000 acres of Fort Stewart is located within a floodplain. Executive Order (EO) 11988, *Floodplain Management*, requires Federal agencies to avoid construction or management practices that will adversely affect floodplains unless (1) there is no practicable alternative and/or (2) the proposed action is designed to minimize harm to or within the floodplain. There must be a finding of no practicable alternative to constructing in the floodplain and verification that all practicable measures were taken to minimize harm to the floodplain.

The Georgia Stormwater Management Manual/Coastal Stormwater Supplement requires (a) the review of all construction projects located within a floodplain and (b) compliance with the Energy Independence Security Act (EISA)-Section 438. When constructing within a floodplain, construction contractors must review the *U.S. Environmental Protection Agency (USEPA) Technical Guidance for Implementation of EISA-Section 438* (USEPA, 2009) and select from a series of floodplain-specific BMPs contained within the document. The BMPs chosen must be tailored to a specific project and its unique site characteristics, in order to best address runoff reduction and flood protection measures and help minimize potential flooding and stormwater concerns in the future. The contractor must also adhere to the standard BMPs provided in the NPDES and other required permits for the site, as well as the Federal and state of Georgia guidelines discussed in earlier paragraphs for the floodplain. A State of Georgia certified Professional Engineer must document all hydrological analyses when preparing the ESPC Plan and incorporate the selected BMPs, ensuring the State and Federal requirements are met for floodplain encroachments and flood controls, inclusive of the runoff reduction and water quality requirements. In addition, State of Georgia requirements must be met, such as elevating the structures at a minimum of one-three foot above the base flood elevation of the 100-year floodplain level.

Wetlands. 33 CFR Part 328.3(b) of the CWA defines wetlands as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” Approximately one-third of Fort Stewart’s 279,000 acres is wetlands of one type or another, based on the National Wetlands Inventory (NWI), a map-based planning tool first initiated by the USFWS in 1974. Despite the Army’s use of the land, wetlands on Fort Stewart are overall healthy. Given their prevalence on the Installation, Fort Stewart has made avoidance and minimization of wetlands impacts a top priority and wetlands are one of the primary factors to be considered when siting a new project. In this manner, much of the avoidance and minimization of wetlands impacts takes place before actual site selection actually occurs.

Robust communities of hydrophytic vegetation are found in wetlands throughout Fort Stewart. Typical species include pond cypress (*Taxodium ascendens*), bald cypress (*Taxodium distichum*), black tupelo (*Nyssa sylvatica*), swamp tupelo (*Nyssa aquatica*), sweetgum (*Liquidambar styraciflua*), pond pine (*Pinus serotina*), water oak (*Quercus nigra*), redbay (*Persea borbonia*), blueberry (*Vaccinium* spp.), fetterbush lyonia (*Lyonia lucida*), and cinnamon fern (*Osmunda cinnamomea*). Carnivorous plants often associated with wetlands include the roundleaf sundew (*Drosera rotundifolia*) and hooded pitcher plant (*Sarracenia minor*) (Fort Stewart, 2001). In areas with regular or permanent standing water, familiar aquatic species such as cattail (*Typha latifolia*), yellow waterlily (*Nymphaea mexicana*), and swamp lily (*Crinum americanum*) are found.

3.4.3 ENVIRONMENTAL CONSEQUENCES

3.4.3.1 Alternative I: No Action Alternative

DMPTR

Surface Water. Under this alternative, the construction, operations, and maintenance of the DMPTR would result in minor impacts to surface water bodies, including one impaired stream, the Canoochee River. Construction, operation, and maintenance activities near impaired streams are avoided when possible, to prevent additional impacts to an already impaired system, such as increasing an associated Total Maximum Daily Loads (TMDLs) for a pollutant causing the impairment. If the discharge or impact is unavoidable, however, specific additional measures are required, including Section 303(d)-required additional BMPs, and must be both included in the design process for the range, as well as implemented to ensure the additional impact to this impaired stream remains below a level of significance.

Adherence to existing regulatory and other requirements during construction, operations, and maintenance is mandatory. These requirements include complying with the CWA, Water Quality Act, Erosion and Sedimentation Control Act (ESCA), Energy Independence and Security Act (EISA), NPDES permit requirements, site-specific ESPC Plan BMPs, Fort Stewart Stormwater Management Plan, an activity specific stormwater pollution prevention plan (SWP3), Executive Order 11988, and a Stormwater Permitting Construction Notice of Intent (NOI), and \$80 per acre fee for the State must be submitted to the Fort Stewart Environmental Office. Any fuel storage tanks will be appropriate above ground storage tanks with secondary containment and housekeeping pads meeting the Installation SPCC Plan. Upon completion of the projects these facilities will be considered Industrial Activities and will be incorporated into the Fort Stewart Master Stormwater Pollution Prevention Plans accordingly. Overall, the construction, operations, and maintenance of the DMPTR at this location will result in minor adverse impacts to Surface Waters.

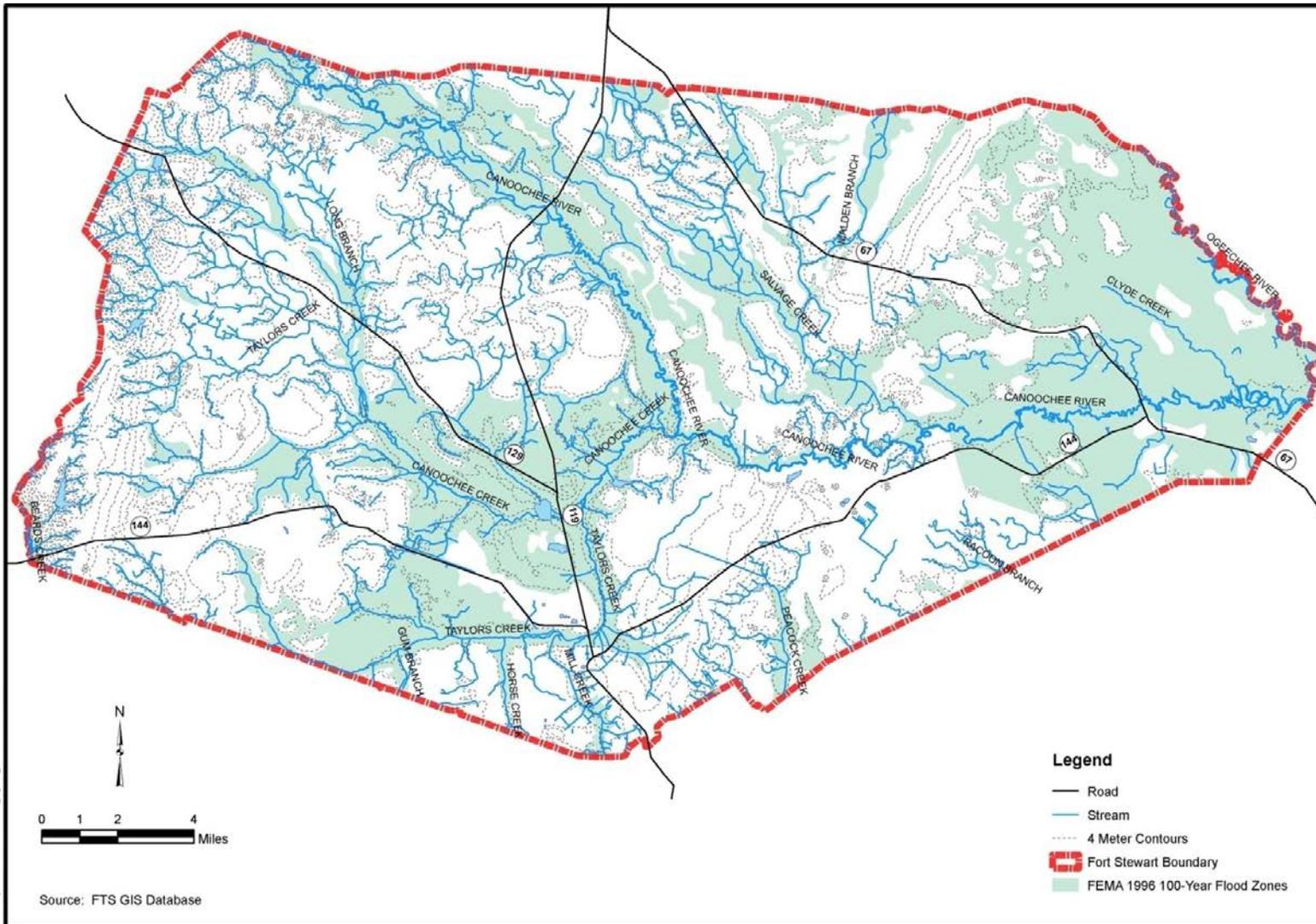


Figure 4: Surface Water Sources on Fort Stewart

The drainage from the new range will be directed to post-construction stormwater BMPs. Stormwater runoff will be treated utilizing acceptable post construction stormwater BMPs as defined in the Georgia Stormwater Management Manual/Coastal Stormwater Supplement, the USEPA Technical Guidance for implementation of EISA Section 438 and DPW Policies #10 and #11. A Georgia Stream Buffer Variance (SBV) may be required if new construction, including infrastructure improvements, cannot avoid the crossing of a stream or if trees and/or vegetation must be removed within a 25-foot buffer of a stream. The SBV application must include an approved ESPC plan that is completely independent and separate from either the NOI submittal for the NPDES General Permit to Discharge Stormwater Associated with Construction Activities or the CWA Section 404 permit processes. The Installation has a resident Natural Resource Conservation Service advisor who will provide technical expertise during preparation of the ESPC plan prior to Fort Stewart approving the final design of land disturbing activities. No determination of “waters of the state” was conducted for this location, so there is a potential for SBV requirements under this alternative.

Floodplains. Under this alternative, construction, operations, and maintenance of the DMPTR would result in minor adverse impacts to approximately 64 acres of the 100-year floodplain. The construction contractors are required to implement the Installation’s Stormwater Management Policy for New Development and Redevelopment. In addition, construction must be in accordance with the standards and criteria of the National Flood Insurance Program, including the application of accepted flood-proofing/flood protection measures, such as elevate structures where practicable.

Wetlands. Under this alternative, the construction, operations, and maintenance of the DMPTR would impact 43.6 acres of jurisdictional wetlands (Figure 7). In conjunction with the 2010 EIS, Fort Stewart obtained a Jurisdictional Determination (JD) and Section 404 CWA Permit from the U.S. Army Corps of Engineers (USACE) for these projected wetlands impacts which may include filling wetlands where unavoidable, installing culverts where required to maintain hydrology, and implementation of wetlands-specific BMPs to prevent erosion and sedimentation during and after construction. The Installation utilized the Compensatory Mitigation Rule (33 CFR Part 332) when developing the mitigation plan for the potential impacts, which addressed proposed avoidance and minimization and the amount, type, and location of the proposed compensatory mitigation, including an intention to use an approved mitigation bank. Guidance specified in the Section 404 Permit, in addition to Timber Harvest and E&S BMPs discussed in earlier section, would be employed to minimize erosion and sedimentation during and after construction activities. As required by the permit, 336.79 wetland mitigation credits were purchased from the Wilkinson-Oconee wetland mitigation bank, which was determined to be the only suitable wetland mitigation bank offering wetland mitigation of an appropriate type and

quantity. Overall, the construction, operations, and maintenance of the DMPTR at this location will result in minor adverse impacts to Wetlands.

ACPQC

Surface Water. Under this alternative, there are no surface water sources at or adjacent to the footprint of the ACPQC and, therefore no impacts to surface water sources.

Floodplains. Under this alternative, there are no floodplains at or adjacent to the footprint of the ACPQC and, therefore, no impacts to floodplains.

Wetlands. Under this alternative, the construction, operation, and maintenance of the ACPQC would impact wetlands located directly adjacent to the proposed range footprint due to the utilization of the new standard design for the ACPQC, which expanded the range's size from two to five acres. An exact acreage impact figure was never determined, as this (in association with potential intrusion into the protected species buffer and other issues of concern) rendered the site non-preferred and Fort Stewart began re-examining the Alternative C site from the 2010 EIS. Minimization of effects would be accomplished through adherence to BMPs, guidance, and requirements in associated permits, AR regulations, and state/Federal laws and regulations. Overall, the construction, operations, and maintenance of the ACPQC at this location will result in negligible adverse impacts to Wetlands.

3.4.3.2 Alternative II: Modified Design

DMPTR

Surface Water. Under this alternative, the construction, operations, and maintenance of the DMPTR would result in negligible adverse impacts, similar to those occurring under Alternative I, but to a lesser degree, due to the smaller footprint of disturbance and construction (700 acres for Alternative II versus 1,005 acres for Alternative I) (Figure 8). Impacts would still occur to one impaired stream, the Canoochee River, but minimized to remain less than significant through the 303(d)-specific BMPs and additional measures discussed under Alternative I. These include complying with the CWA, Water Quality Act, ESCA, EISA, NPDES permit requirements, site-specific ESPC Plan BMPs, Fort Stewart Stormwater Management Plan, an activity specific SWP3, Executive Order 11988, Permitting Construction NOI, and \$80 per acre fee for the State. A SBV should not be required as part of the modified design, as a GA EPD site visit on August 16, 2011 determined the current footprint does not impact "waters of the state."

Floodplains. Under this alternative, the construction, operations, and maintenance of the DMPTR would result in negligible adverse impacts, impacting 1.47 acres of the 100 year floodplain would occur as a result of this alternative. As with Alternative I, there is no practicable alternative to locating these projects within floodplains, within the meaning of Executive Order 11998.

Prior to design, this range was permitted for 43.6 acres of wetlands impact, as reported in the EIS.

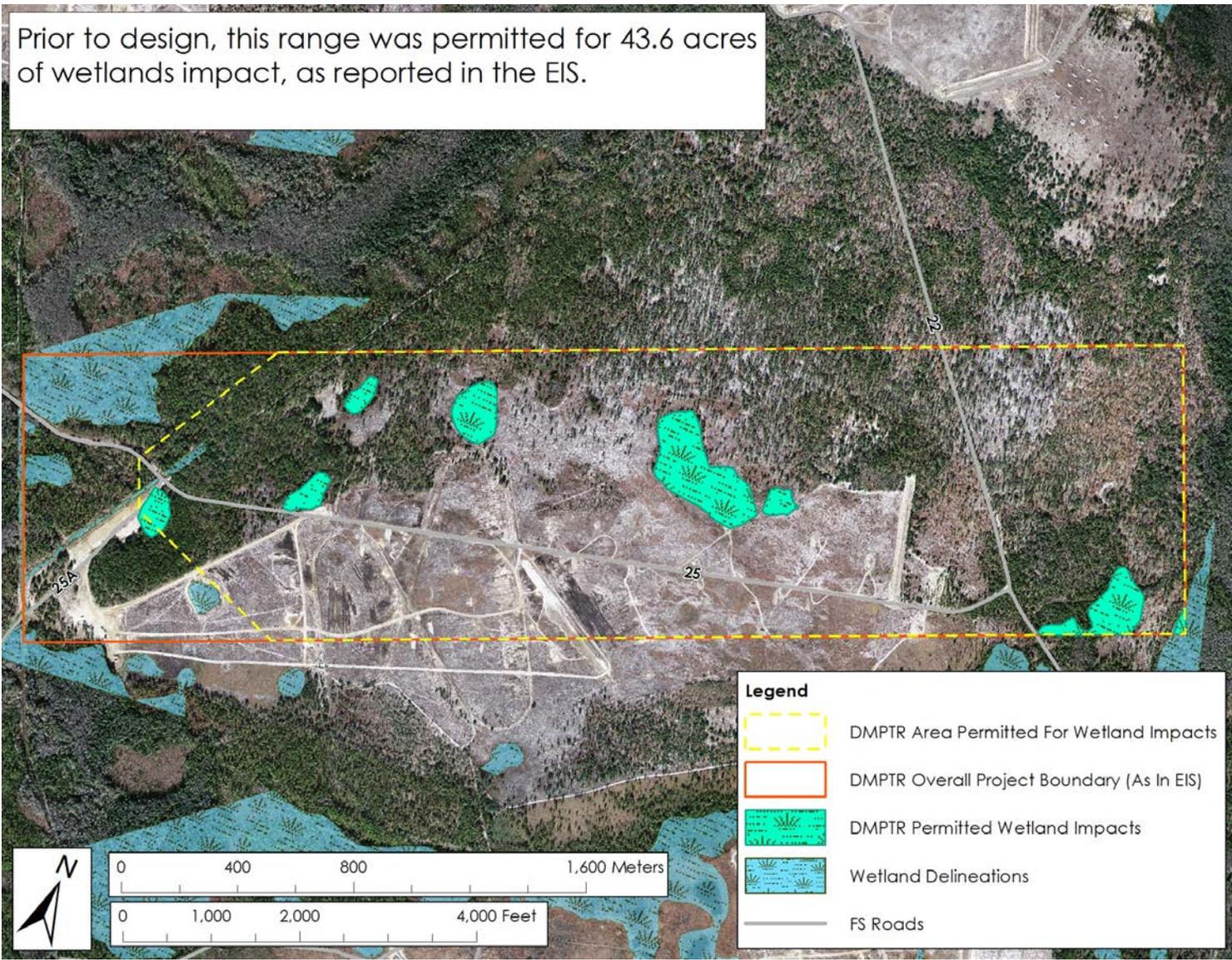


Figure 5: Alternative I Configuration of DMPTR

The construction contractors would be required to adhere to all requirements as discussed under Alternative I, including implementing the Installation's Stormwater Management Policy for New Development and Redevelopment, the standards and criteria of the National Flood Insurance Program, all state of Georgia requirements, and the USEPA Technical Guidance for Implementation of EISA-Section 438 BMPs.

Wetlands. Under this alternative, the construction, operations, and maintenance would result in minor adverse impacts, resulting from unavoidable impacts to 37.27 acres of wetlands, occurring due to the shift of the entire range footprint 100 meters to the west. This completely avoids the Strum Bay wetlands system, as well as several small, isolated additional wetlands and their associated buffers within the adjusted footprint. Fort Stewart will obtain a Jurisdictional Determination from the U.S. Army Corps of Engineers for the DMPTR to verify this finding, as well as modify its existing Section 404 Clean Water Act Permit, which is currently correlated with the larger impact of the original footprint permitted under Alternative I. The permit modification will be subject to the full regulatory review process, including a public notice period if required. Implementation of specific guidance from the Permit and BMPs, as discussed under Alternative I, would be implemented to maintain this minimization of effect.

ACPQC

Surface Water. Under this alternative, the construction, operations, and maintenance of the ACPQC would result in negligible adverse impacts to surface water bodies, including one impaired stream – Taylor's Creek. Avoidance of impaired streams would be emphasized, but if unavoidable, specific additional measures and BMPs, would be employed, as discussed under Alternative I and include complying with the CWA, GA Water Quality Act, ESCA, EISA, NPDES permit requirements, site-specific ESPC Plan BMPs, Fort Stewart Stormwater Management Plan, an activity specific SWP3, Executive Order 11988, Permitting Construction NOI, and \$80 per acre fee for the State.

Floodplains. Under this alternative, there are no floodplains at or adjacent to the footprint of the ACPQC and, therefore, no impacts to floodplains.

Wetlands. Under this alternative, the construction, operations, and maintenance of the ACPQC would result in no impacts to wetlands within the range footprint, although there are wetlands surrounding it on the north, west, and east sides. Maintenance of at least a 25-foot buffer between the footprint of disturbance and the wetland boundaries, in all cases, would minimize the potential for impacts, as would adherence to BMPs, guidance, and requirements in associated permits, AR regulations, and state/Federal laws and regulations.

Cumulative Impacts. No significant or potentially significant cumulative impacts to water quality will occur from the No Action, Proposed Action, and PPRFFAs outlined in Section 3.1.

Under the 90% design (the last design reviewed), wetland impacts are expected to total 37.3 acres.

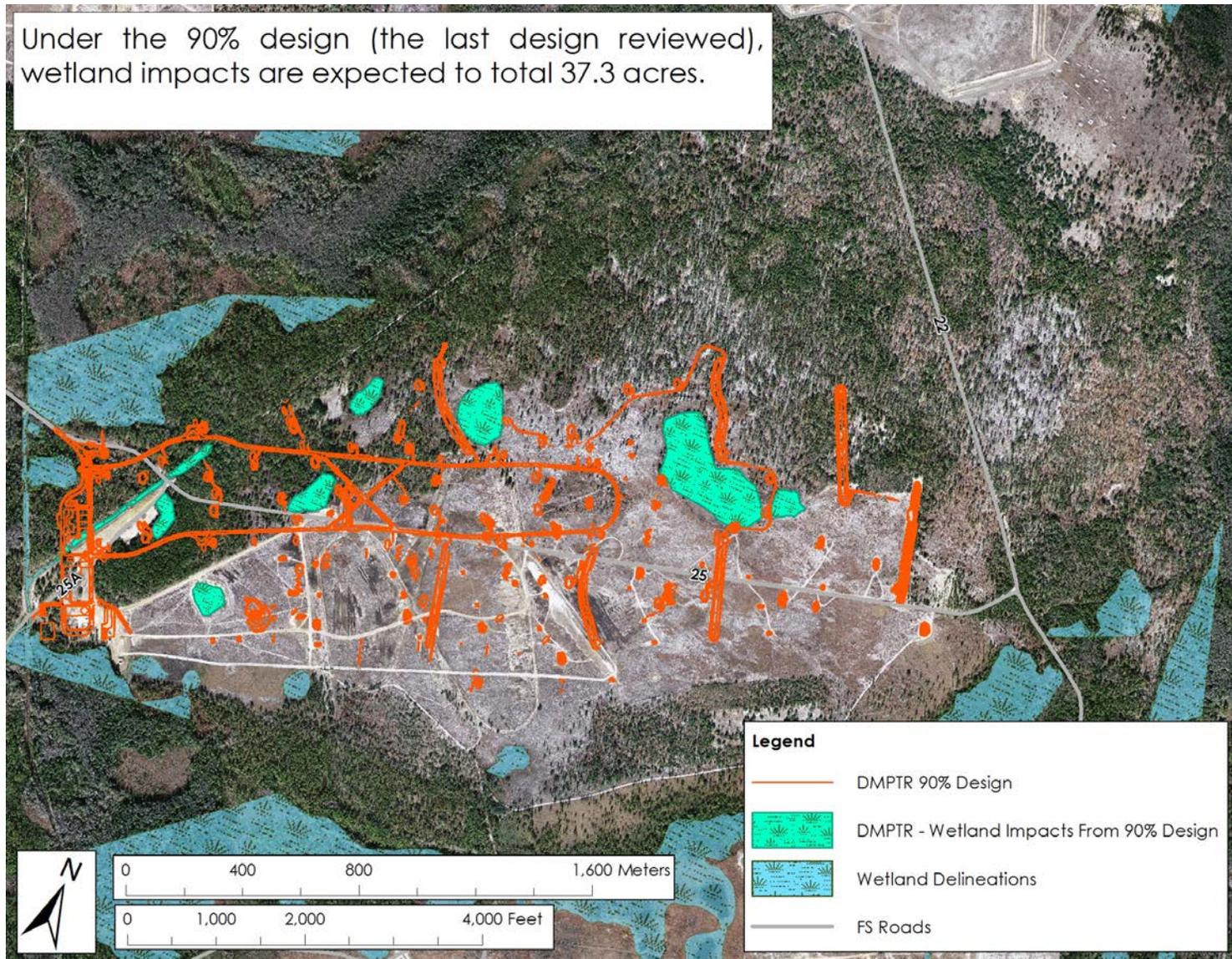


Figure 6: Alternative II Configuration of DMPTR

Some of these projects will be built in floodplains and surface water bodies will be impacted; however, the water quality in surface water bodies within and surrounding the DMPTR, ACPQC, and pending ranges will not have a cumulative impact because the above-mentioned regulatory and other requirements will be complied with during construction, operation, and maintenance. In addition, floodplains will be avoided where possible; however, if there is no practicable alternative, then the projects will be designed to minimize harm to or within the floodplains by complying with floodplain BMPs, Fort Stewart Stormwater Management Policy for New Development and Redevelopment, standards and criteria of the National Flood Insurance Program, State of Georgia requirements, and USEPA Technical Guidance for Implementation of EISA-Section 438. A substantial decrease in the environmental benefit of the Installation's wetland systems is not anticipated from these projects because monitoring will be conducted during and after construction to ensure compliance with Section 404 permits.

3.5 SOLID WASTE AND HAZARDOUS MATERIALS AND WASTES

3.5.1 INTRODUCTION

A detailed description of the Installation's waste management and disposal methods, in accordance with the Resource Conservation Recovery Act (RCRA), Official Code of Georgia (OCGA) 12-8-60, 12-8-90, and 12-8-200, DA Regulations, RCRA Part B Permit No. HW-045(S), and Army policy to mandate recycling maximization is presented in the Fort Stewart EIS (Sections 3.9.4, 3.11, 4.8.2.2, and 4.10). This section of the Draft EA will discuss analysis conducted and the waste requirements specifically for the FY13 DMPTR and ACPQC.

3.5.2 AFFECTED ENVIRONMENT

Solid Waste. Fort Stewart has one sanitary landfill, one non-putrescible (non-sanitary) landfill, and two inert materials landfills. The Sanitary Landfill's waste stream is generated from the contents of the brown dumpsters on the Installation, which are currently placed at all administrative buildings and industrial activities. These dumpsters are clearly labeled for "wastes" only and are not intended for the collection of recyclable content. Contractors are not allowed to use these dumpsters or the Installation landfills, however, and must dispose of all commercial, construction, and demolition-generated debris in a permitted, off-Post landfill, in accordance with Federal, state, and local rules and regulations unless otherwise stated in the contract.

Fort Stewart has a mandatory recycling program. Its policy on recycling is governed by the "US Army Installation, Fort Stewart/Hunter Army Airfield Policy Memorandum #8, Command Recycling Policy," dated February 12, 2007. All recyclables generated through construction projects must be separated from other wastes and delivered to the Installation's Processing Station/Recycling Center. Roll-off containers for recycling materials can be provided to the

contractor upon request, if available, to the Installation's Environmental Office to help facilitate this process.

Hazardous Materials and Wastes. Fort Stewart has a comprehensive program to address the management of hazardous waste, hazardous materials, and toxic substances, to include the proper handling and disposal of hazardous waste and procurement, use, storage, and abatement (if necessary) of toxic substances. Hazardous materials are stored securely in maintenance areas, flammable storage lockers/areas, mobile transfer units, and aboveground storage tanks (ASTs). All hazardous waste generated at Fort Stewart (including the Garrison and downrange areas) is transported to the Hazardous Waste Storage Facility, Building 1157, for storage and eventual shipment off site for proper disposal.

3.5.3 ENVIRONMENTAL CONSEQUENCES

Note: the analysis in this section applies to both alternatives for the DMPTR and ACPQC.

All facility operations activities, including those that support Fort Stewart's training mission, require the storage and disposal of both solid wastes and hazardous materials/wastes, all of which must be in accordance with existing Installation policies and protocols.

Solid Waste Management and Disposal. All contractors involved in construction, operation, and maintenance of the DMPTR and ACPQC (Alternatives I and II) at Fort Stewart must properly dispose of all solid waste generated in an off-Post permitted disposal facility in accordance with all Federal, state, and local rules and regulations. The contractor must provide a copy of landfill scale tickets resulting from this disposal to their Contracting Officer's Representative, who will ensure that copies of the landfill scale tickets are provided to the Fort Stewart Environmental Office. Achievement of 50% diversion, by weight, of all non-hazardous construction and/or demolition solid waste debris is required, in accordance with the Installation's Command Recycling Policy. The contractor(s) working this project are required to salvage or recycle as much of the materials as possible. Overall, the construction, operations, and maintenance of the range at either location will result in negligible adverse impacts to Solid Waste Management and Disposal on site.

Hazardous and Toxic Materials Management and Disposal. All contractors involved in the construction of the DMPTR and ACPQC (Alternatives I and II), from timber harvest to facility construction, will be required to follow the USACE Safety and Health Manual 385-1-1 (USACE, 2008). This manual outlines the requirements to comply with the Occupational Safety and Health Act standards during any construction or demolition process, and includes provisions should contaminated soils and / or groundwater are encountered during construction activities.

Certain components of the DMPTR and ACPQC will contain hazardous substances including flammables and fluids such as hydraulic fluids, gasoline, diesel, oils, lubricants, and antifreeze.

When encountered, hazardous materials and wastes will be handled in accordance with the Installation's Hazardous Materials Management Plan, Installation permits, spill contingency plans, and other applicable Federal regulations and guidance as well as state and local regulations. Overall, the construction, operations, and maintenance of the range will result in negligible adverse impacts to Hazardous and Toxic Materials Management and Disposal on site.

Cumulative Impacts. No significant or potentially significant cumulative waste management or disposal impacts will occur from the proposed action, no action, and PPRFFAs outlined in Section 3.1. There will be no change in Fort Stewart's management of solid waste, recycling, hazardous materials, toxic substances, hazardous waste, or contaminated sites. The Installation will continue to manage existing sources of hazardous waste in accordance with the Installation's Hazardous Waste Management Plan. Fort Stewart also utilizes an aggressive RCRA compliance inspection program. The potential for spills is mitigated by ensuring all planned tanks are aboveground, are double-walled, or are set in secondary containment; and the implementation of best management practices (drip pans, absorbent pads, etc) that are conformant to Fort Stewart's Spill Prevention Control and Countermeasure Plan.

3.6 HEALTH and SAFETY

3.6.1 INTRODUCTION

Health and Safety includes the evaluation of fire and police protection, health services, traffic hazards, safety danger zones (SDZ) associated with on-Post training ranges and airfields, and safety issues during construction. Neither of the alternatives will impede the ability of local facilities (police, fire, and hospitals) to provide health care services, nor will the alternatives introduce any increase in the population that would over-tax local facilities; therefore, no impacts to health care availability will occur under any alternative, and health is not analyzed further.

3.6.2 AFFECTED ENVIRONMENT

Construction and demolition activities are performed by or contracted by the USACE and must follow their Safety and Health Manual 385-1-1 (USACE, September 2008). This manual also outlines the requirements to ensure full compliance with Occupational Safety and Health Act (OSHA) standards during the entire site clearing (such as timber harvest and/or demolition of existing facilities) and construction process. For both action alternatives, prescribed safety standards will be required and only authorized personnel will be allowed within the footprint for construction; in addition, all workers must adhere to safety standards established by OSHA.

Based on each proposed range's training purpose, each range must be of sufficient acreage to accommodate the SDZs for use of the specified munitions, as required by Department of the Army Pamphlet (DA PAM) 385-64, *Ammunition and Explosive Safety Standards*. The SDZ is a temporary safety boundary that surrounds the firing range and associated impact area that

provides a buffer to protect personnel from the non-dud producing rounds that may ricochet during operation of the range. The Installation's range safety program is required to factor in SDZ calculations for use of specified munitions when siting ranges to ensure that there is an adequate buffer area to protect personnel from rounds that may be ricocheted during operation of the range. Specific safety considerations related to the proposed action involve the discovery of unexploded ordnance (UXO) during land disturbing activities.

UXO is found primarily in Fort Stewart's existing impact areas, where dud-producing ammunition is fired; however, as Fort Stewart has been an active military Installation for more than 60 years, it is possible for UXO to be found in non-impact areas, such as former closed range areas. A UXO avoidance plan is also a requirement for construction in former range areas and/or all lands categorized as "operational" in land use, as a safety precaution. The construction contractor's UXO avoidance plan can be included as part of the contractor's Health and Safety plan and must be approved by the Installation's Safety Office prior to land disturbance. A fence must be installed around the construction site, with signage that only authorized personnel are allowed on site. All personnel that will be working on site, to include construction contractors, must take a UXO awareness training/safety briefing that will be conducted initially by Fort Stewart. This requirement must be incorporated as part of the UXO avoidance plan. The Installation's Range Control Division provides a training class twice a month to Soldiers and Civilians so that they may be familiar with UXO identification, safety protocols, and reporting requirements if UXO is encountered. Only EOD personnel qualified in UXO identification and removal procedures are allowed to conduct UXO clearance operations.

3.6.3 ENVIRONMENTAL CONSEQUENCES

DMPTR

Both the No Action and Modified Design alternatives for the DMPTR are located atop the existing Red-Cloud Foxtrot Range. Surveys conducted by the Huntsville USACOE identified areas of Low, Medium, and High Risk for UXO within the range footprint. Therefore, UXO removal must occur prior to timber harvest, demolition of existing structures, and construction of the new range at the site. As discussed previously, only EOD personnel qualified in UXO identification and removal procedures will be involved in clearance operations; however, all workers on site will be instructed how to identify UXO and contact the appropriate office for assistance if UXO is inadvertently discovered following clearance actions and during timber harvest or construction. The construction of the DMPTR at this location will not result in the creation of a new SDZ, nor will it result in the extension of an SDZ across Fort Stewart's boundary or within the existing Garrison area. Overall, the construction, operations, and maintenance of the DMPTR will result in minor adverse impacts to Safety on site.

ACPQC

Neither alternative location is located atop an existing range and does not lie within any existing SDZs; however, the Huntsville COE survey determined there was a low-to-medium risk of encountering UXO at these locations, due primarily to the fact that training has occurred across the Installation during its history and therefore UXO has the potential to be present. UXO removal will precede timber harvest and construction, and development and adherence to a UXO Avoidance Plan will be required, as discussed under the DMPTR. Construction at either location will not result in a new SDZ or result in the extension of an SDZ across Fort Stewart's boundary or existing Garrison area. Overall, the construction, operations, and maintenance will result in negligible adverse impacts to Safety on site.

Cumulative Impacts. No significant or potentially significant cumulative safety impacts will occur from the No Action, Proposed Action, and PPRFFAs outlined in Section 3.1. There will be no change in Fort Stewart's compliance with and adherence to OSHA standards for worker safety and USACE/Installation protocols for UXO identification, removal, and/or avoidance. These actions will also result in no new impact areas or their extension across the Installation boundary, individually or cumulatively.

4.0 CONCLUSIONS

This Draft EA analyzed the potential impacts of footprint alterations and site location changes for the DMPTR and ACPQC at Fort Stewart, Georgia and is tiered off the 2010 *Fort Stewart Environmental Impact Statement for Training Range and Garrison Support Facilities Construction and Operation*, which analyzed the original footprints and site locations for these projects. Following an analysis and comparison of impacts of the proposed action and no action alternatives (see Summary Table, below), it was determined that neither will result in significant impacts, and the preparation of a Finding of No Significant Impact and Finding of No Practicable Alternative are appropriate. The Army will therefore proceed with the preparation of both for this action.

| Type of Impact | Alternative I (No Action) DMPTR/ACPQC | Alternative II (Preferred) DMPTR/ACPQC |
|--|---|--|
| Species of Concern | | |
| Direct / Indirect | Negligible/Negligible | Minor/Negligible |
| Cumulative | No | No |
| Cultural Resources | | |
| Direct / Indirect | No Impact/No Impact | Negligible/No Impact |
| Cumulative | No | No |
| Water Quality – Surface Water | | |
| Direct / Indirect | Minor/No Impact | Negligible/Negligible |
| Cumulative | No | No |
| Water Quality - Floodplains | | |
| Direct / Indirect | Minor/Negligible | Negligible/No Impact |
| Cumulative | No | No |
| Water Quality - Wetlands | | |
| Direct / Indirect | Minor/Negligible | Minor/No Impact |
| Cumulative | No | No |
| Solid Waste Management and Disposal | | |
| Direct / Indirect | Negligible/Negligible | Negligible/Negligible |
| Cumulative | No | No |
| Hazardous and Toxic Materials Management and Disposal | | |
| Direct / Indirect | Negligible/Negligible | Negligible/Negligible |
| Cumulative | No | No |

| Public Health and Safety | | |
|---------------------------------|------------------|------------------|
| Direct / Indirect | Minor/Negligible | Minor/Negligible |
| Cumulative | No | No |

5.0 REFERENCES AND PERSONS CONSULTED

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APPENDIX A

**Environmental and Socioeconomic Resources
Eliminated From Detailed Review**

Analysis by Fort Stewart's environmental resource managers determined that some, but not all, of the Installation's environmental and socioeconomic resources have the potential to be impacted by proposed action and required detailed analysis, as discussed in the main body of the Draft EA. These resources included Species of Concern, Cultural Resources, Water Quality (Surface Water, Floodplains, and Wetlands), Solid Waste & Hazardous Materials/Wastes, and Health & Safety. Resources not impacted, or impacted to only a temporary degree, are discussed below.

Wildlife. Impacts to wildlife at the No Action or Proposed Action alternatives for the DMPTR and ACPQC would be temporary, with wildlife leaving the area at the start of timber harvest and construction, then returning again once normal operations and maintenance activities began, a routine process evidenced at other ranges throughout the Installation. Therefore, this resource was not carried forward for further analysis.

Air Quality. Under the provisions of the Clean Air Act (CAA) and its amendments, the mechanisms for establishing the Prevention of Significant Deterioration (PSD) program were enacted, whereby Congress established land classification schemes (zones) for those areas of the country (like Fort Stewart) having air quality better than the National Ambient Air Quality Standards. Fort Stewart is in an air quality district that is in attainment for criteria pollutant emissions and PSD, with timber harvest, construction, and operation at the No Action or Proposed Action alternatives for the DMPTR and ACPQC creating only minor, temporary adverse effects. Although Fort Stewart is a major source of air emissions (per Title V of the CAA and its amendments) the proposed action will require no amendments to the Installation's Title V permit and only minor, temporary dust generation during timber harvest, construction, and operation. Standard installation of dust-minimizing and other air quality protection measures will further minimize this potential, and no regulatory thresholds would be exceeded under air quality. Therefore, this resource was not carried forward for further analysis.

As for global warming, scientists have concluded that human activities are changing the composition of the atmosphere, and that increasing the concentration of greenhouse gases will change the planet's climate. There is uncertainty as to how much it will change, and at what rate. This project removes trees that would otherwise absorb carbon dioxide. This is a negligible cumulative impact when taken in context of the global situation and the Army's efforts. Although timber harvest will occur, landscaping will follow construction, where feasible, and trees left standing where not impeding line of sight from shooter-to-target, minimizing impacts to global warming. It is also important to place these carbon emissions in the context of the federal government's overall plan to reduce carbon emissions. Executive Order 13423 sets as a goal for all federal agencies the improvement of energy efficiency and the "reduc[tion] of greenhouse gas emissions of the agency, through reduction of energy intensity by (i) 3 percent annually through the end of fiscal year 2015, or (ii) 30 percent by the end of fiscal year 2015, relative to the

baseline to the agency's energy use in fiscal year 2003." The U.S. Army Energy Strategy for Installations (U.S. Army Energy Strategy for Installations, 8 July 2005, available at <http://army-energy.hqda.pentagon.mil/docs/strategy.pdf>) also contains strategies to reduce energy waste and improve efficiency. Taking these policies into account, this action does not represent a net incremental addition to the global climate change problem.

Groundwater. Fort Stewart draws its water supply from three distinct aquifer systems: the Floridan, Brunswick, and surficial (near surface) aquifers. Although the DMPTR and ACPQC (Alternative I only) will tap into the groundwater system for water withdrawals, it will have no adverse impact on groundwater or the aquifers, nor will it cause an exceedance in the Installation's permitted capacity for water withdrawals from this aquifer.

Utilities. Utilities at Fort Stewart include electrical power, natural gas, potable water supply systems, and wastewater systems. Utilities requirements at both DMPTR alternative locations are the same, as the alternatives differ only in the orientation of the range footprint and its total acreage. The DMPTR will tie into existing electrical power and lighting, a new telecommunications/fiber optic/data/telephone connections will be established via the ongoing Information Infrastructure Modernization Program (I3MP) project, a well for a potable drinking water supply, and a septic system versus sewer connections. Utilities requirements at the ACPQC will include connections to new overhead power lines for electrical power and lighting, a new telecommunications/fiber optic/data/telephone connections via the I3MP project, a well for potable drinking water at the Alternative I location (water will be brought on-site for training at the Alternative II location), and portable toilets versus sewage connections. Utility supplies are in ample supply for the needs of both ranges and will not impact or cause an exceedance in any permitted capacities currently held by the Installation. Therefore, this resource was not carried forward for further analysis.

Noise. The Noise Control Act establishes a policy to promote regulation of noise to achieve an environment free from harmful effects to the health and welfare of individuals and society as a whole. Noise can be defined as unwanted sound, occurring when a receptor has an appreciation for the sound received. Sensitive noise receptors can include both human beings as well as biological resources. Noise impacts from the timber harvest and construction of the DMPTR and ACPQC at either alternative location will occur within the Installation boundary and away from sensitive human receptors, such as schools and hospitals. Prior experience with harvest and construction has shown wildlife/species of concern to be tolerant of such activities, so this is not considered an adverse impact to biological resources. Training activities will occur in training areas that are cleared for such actions, and personnel working and/or training at the DMPTR and ACPQC, once operational, are to adhere to hearing protection requirements defined in health and safety plans and guidelines. Therefore, this resource was not carried forward for further analysis.

Land Use and Recreation. The timber harvest, construction, operation and maintenance of the DMPTR and ACPQC at either alternative location will occur within lands designated as operational training lands. No recreational assets are present in these areas. Therefore, there is no impact to Land Use and Recreation and this resource was not carried forward for further analysis

Transportation. Implementation of the proposed action is not expected to impact transportation resources on Fort Stewart. The Installation contains well-established highways, roads, and parking networks and would not increase or decrease traffic in the area of the either alternative. Therefore, this resource was not carried forward for further analysis

Socioeconomics. Socioeconomics focuses on the general features of the local economy that could be affected by the proposed action alternative and include: current and projected population and relevant demographic characteristics; local government revenues, expenditures, and revenue-sharing arrangements; current and projected housing capacity; current and planned public service capacity (water, sewer, transportation, police, fire, health, education, and welfare); economic structure and labor force characteristics; local government characteristics; local organizations and interest groups; social structure and life styles and local support or opposition to the proposed project. No perceptible impacts to housing, public and social services, public schools, public safety, or recreational activities is expected. This construction project could be accommodated by the existing workforce, and few new jobs would be created. In addition, it is probable that the majority of the construction materials will be purchased outside the local region and transported on-site. Because few jobs would be created or affected through implementation of this proposed action and any impact would be slightly beneficial, this resource has been eliminated from further discussion.

Environmental Justice. Environmental justice compliance is prescribed by Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, issued in 1994. This policy directive to federal agencies outlines appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Since the range construction and operations actions would occur within the Installation boundary and would not disproportionately impact low-income or minority populations, environmental justice was not carried forward for further analysis.

Provision for the Handicapped. American Disabilities Act requires access be provided for the handicapped in all facilities constructed. Since the DMPTR and ACPQC are not areas likely to have the handicapped present, there is no impact and this resource was not carried forward for further analysis.

Protection of Children. Executive Order 13045, *Protection of Children from Environmental Health Risks and Safety Risks* requires each federal agency to identify and assess environmental health and safety risks that may disproportionately affect children and pose a disproportionate environmental health or safety risk to children. Environmental health and safety risks are those, which are attributable to products or substances a child is likely to come into contact with or to ingest. This Executive Order focuses primarily on the noise environment around schools, which is not an issue with regards to implementation of range construction and operations. Therefore, there is no impact and this resource was not carried forward for further analysis.

Sustainability Management: As required by Executive Order 13514, Federal agencies shall implement high performance, sustainable Federal building design by ensuring that all new construction, major renovation, or repair and alteration of Federal buildings complies with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings. Federal Agencies are required to incorporate the Guiding Principles for New Construction and Major Renovations into all new construction, major renovation, or repair and alteration of Federal Buildings. This guidance, at http://www.wbdg.org/references/fhpsb_new.php, addresses (1) employing integrated design principles, (2) optimizing energy performance, (3) protecting and conserving water, (4) enhancing indoor environmental quality, and (5) reducing environmental impact of materials. This requirement is part of the design process and a required part of the construction contract for the DMPTR and ACPQC, regardless of the alternative selected as preferred. Therefore, compliance will occur and no impacts are predicted. For this reasons, it is not discussed in the main body of the Draft EA.

APPENDIX B

**U.S. Fish and Wildlife Service
Consultation**



United States Department of the Interior

Fish and Wildlife Service

105 West Park Drive, Suite D
Athens, Georgia 30606
Phone: (706) 613-9493
Fax: (706) 613-6059

West Georgia Sub-Office
Post Office Box 52560
Fort Benning, Georgia 31995-2560
Phone: (706) 544-6428
Fax: (706) 544-6419

Coastal Sub-Office
4980 Wildlife Drive
Townsend, Georgia 31331
Phone: (912) 832-8739
Fax: (912) 832-8744

July 30, 2012

Mr. Robert R. Baumgardt
U.S. Army Installation Management Command
Directorate of Public Works
1587 Frank Cochran Drive
Fort Stewart, Georgia 31314-5048
Attn: Mr. Tim Beaty

Re: USFWS Log #2012-I-0739

Dear Mr. Baumgardt:

Thank you for your recent letter and attached biological assessment and map concerning the proposed Utilities and Power Line Right-of-Way (UPROW) construction in Training Area D-5 in Liberty County on Fort Stewart, Georgia. A total of 7.4 acres will be clearcut in this new proposed action. We have reviewed the information you provided and submit the following comments under provisions of the Endangered Species Act of 1973 (ESA), as amended; (16 U.S.C. 1531 *et seq.*).

According to the information you provided, the project will impact only a total of about 7.4 acres of existing red-cockaded woodpecker (RCW) Habitat Management Unit. The nearest known occurrence of an Eastern indigo snake is 6.3 miles northeast of the action area. The nearest historical sighting of a frosted flatwoods salamander is 3.4 miles northeast of the proposed project. The nearest known sighting of foraging wood storks is at least 4.0 miles northeast of the project site. Therefore, due to the small amount of habitat that will be impacted by the proposed project, we agree with your determination that this proposed project is not likely to adversely affect any federally listed endangered or threatened species. Also, we believe that the requirements of section 7 of the ESA have been satisfied and no further consultation is required. However, obligations under section 7 of the ESA must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner which was not considered in this assessment; or (3) a new species is listed or critical habitat determined that may be affected by the identified action.

We appreciate the opportunity to comment during the planning stages of your project. If you have any questions, please contact Robert Brooks of our Coastal Georgia Office at 912-832-8739, extension107.

Sincerely,



Sandra S. Tucker *for*
Field Supervisor



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, US ARMY GARRISON, FORT STEWART / HUNTER ARMY AIRFIELD
DIRECTORATE OF PUBLIC WORKS
1587 FRANK COCHRAN DRIVE
FORT STEWART, GEORGIA 31314

Directorate of Public Works

MAY 12 2012

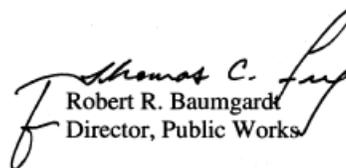
U.S. Department of the Interior
Fish and Wildlife Service
Georgia Ecological Field Services Field Office
4980 Wildlife Drive, NE
Townsend, Georgia 31331

Dear Ms. Tucker:

Reference FWS Log No: 2010-0137, the Biological Opinion (BO) on the Proposed Construction of 12 New Ranges and an Unmanned Aerial System on Fort Stewart, Georgia. A Utilities and Power Line Right-of-Way (UPROW) is needed for the Combat Pistol Qualification Course (CPQC) scheduled for construction in Fort Stewart Training Area (FSTA) Delta 5.5 (Liberty County, Georgia). This modification of our original assessment accounts for the additional acreage needed for the clearing and construction of the UPROW.

Our original conclusion of the affect of the action on the RCW and other species remains unchanged, i.e., the proposed action may affect, but is unlikely to adversely affect the RCW, frosted flatwoods salamander, wood stork, or eastern indigo snake. The proposed action will not affect the shortnose sturgeon. The original conclusion regarding critical habitat also remains unchanged. If additional information is needed, please contact Mr. Tim Beaty, DPW, Environmental Division, Fish and Wildlife Branch, at telephone (912) 767-7261. Your continued cooperation and assistance are appreciated.

Sincerely,


Robert R. Baumgard
Director, Public Works

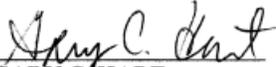
Enclosures

BIOLOGICAL ASSESSMENT

Modification to construct a Utility and Power Line Right-of-Way for the FY13 Combat Pistol Qualification Course in Delta 5.5

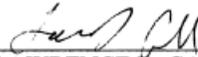
Fort Stewart, Georgia

Prepared By:



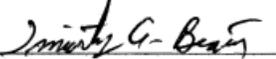
GARY C. HART
Wildlife Biologist
Fish and Wildlife Branch
Environmental Division
Directorate of Public Works
Fort Stewart, GA

Reviewed By:



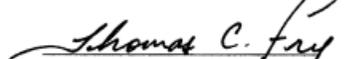
LAWRENCE D. CARLILE
Chief, Planning and Monitoring
Fish and Wildlife Branch
Environmental Division
Directorate of Public Works
Fort Stewart, GA

Submitted By:



TIMOTHY A. BEATY
Chief, Fish and Wildlife Branch
Environmental Division
Directorate of Public Works
Fort Stewart, GA

Approved By:



THOMAS C. FRY
Chief, Environmental Division
Directorate of Public Works
Fort Stewart, GA

PROJECT DESCRIPTION

Fort Stewart (FS) proposes to construct a utility and power line right-of-way (UPROW) for the FY13 Combat Pistol Qualification Course (CPQC) site in FS Training Area (TA) Delta 5.5 (Figure 1). The UPROW is necessary to provide utility services and electrical power to the CPQC.

SITE DESCRIPTIONS

Forested habitat within the proposed action area is composed of a canopy dominated by longleaf pine (*Pinus palustris*) and slash pine (*P. elliotii*), with a mid-story of sweetgum (*Liquidambar styraciflua*), water oak (*Quercus nigra*), live oak (*Q. virginiana*), wax myrtle (*Myrica cerifera*), and red bay (*Persea borbonia*). The groundcover is characterized by saw palmetto (*Serenoa repens*), gallberry (*Ilex glabra*), shiny blueberry (*Vaccinium myrsinites*), and rusty lyonia (*Lyonia ferruginea*). Wetland systems adjacent to the proposed project are dominated by pond cypress (*Taxodium ascendens*), blackgum (*Nyssa sylvatica*), pond pine (*P. serotina*), and red maple (*Acer rubrum*). The soil types within the project area are Mascotte fine sand, Ellabelle loamy sand, Johnston and Bibb soils, and Leefield loamy sand.

SPECIES CONSIDERED

The following species occur, or may occur, in the proposed action area and were considered in this assessment:

Red-cockaded woodpecker (*Picoides borealis*) - Endangered
Eastern indigo snake (*Drymarchon couperi*) - Threatened
Frosted flatwoods salamander (*Ambystoma cingulatum*) - Threatened
Shortnose sturgeon (*Acipenser brevirostrum*) - Endangered
Wood stork (*Mycteria americana*) - Endangered

DISCUSSION

Red-cockaded Woodpecker

The project site will require the removal of 7.4 acres of Red-cockaded Woodpecker (RCW) Habitat Management Unit (HMU) and will consist of clear-cutting, grubbing, grading, and future maintenance for the UPROW (Figure 2). The nearest forage partition to the project area is Cluster 214 which is 0.1 miles north of the project area (Figure 2).

To summarize the impacts of the proposed modification of the project on the RCW: 7.4 acres will be removed from the RCW HMU in FSTA Delta 5. The proposed project may affect, but is not likely to adversely affect the RCW, nor will it prevent the Installation from achieving its recovery goal of 350 potential breeding groups (PBGs). Ongoing management and monitoring programs at the Installation have resulted in a well-documented population increase with ample habitat to support continued growth to achieve population recovery circa 2012.

Eastern Indigo Snake

The project area does not lie within the FS eastern indigo snake HMU. No eastern indigo snakes have ever been detected in the project area. The nearest known occurrence of an eastern indigo snake is 6.3 miles northeast of the action area in FSTA Bravo 4 (Figure 3). This project will not impact gopher tortoise habitat. The nearest gopher tortoise habitat is 2.6 miles north of the project area in FSTA Delta 6.1 (Figure 3). The proposed project may affect, but is not likely to adversely affect eastern indigo snakes.

Frosted Flatwoods Salamander

The entire proposed action area lies within the Fort Stewart frosted flatwoods salamander (FFS) HMU but will not impact any potential FFS breeding ponds or their associated buffers. No FFS have ever been detected in the action area. The nearest historical sighting of a FFS is approximately 3.4 miles northeast of the action area in FSTA Bravo 6 (Figure 3). Because of its distance from confirmed FFS sightings, the proposed project may affect, but is not likely to adversely affect the FFS or the landscape's ability to support FFS.

Wood Stork

No wood storks were observed in the proposed project area, nor have they been observed foraging in the action area. The proposed action will not impact wetlands. The nearest area where foraging wood storks have been observed is approximately 4.0 miles northeast of the action area in Pond 34 (Figure 3). The proposed project may affect, but is not likely to adversely affect wood storks.

Shortnose Sturgeon

Telemetry and capture data, which was collected as part of Fort Stewart's shortnose sturgeon monitoring program, indicate these fish do not travel >2 miles up the Canoochee River or >20 miles up the Ogeechee River from the Canoochee/Ogeechee River confluence. The Canoochee River flows diagonally through the Installation while the Ogeechee River forms much of the Installation's eastern boundary. The proposed project lies >15 miles west of the nearest shortnose sturgeon occurrence on the Canoochee River. Project design will incorporate protections measures as required by the Clean Water Act and the Georgia Erosion and Sedimentation Control Act to ensure appropriate wetland and stream protection. Due to the distance of documented sturgeon sightings from the proposed project area and the above mentioned protection measures, this action will not affect the shortnose sturgeon.

CUMULATIVE EFFECTS

There are no foreseeable state, local, tribal, or private actions that would have a cumulative adverse effect when combined with impacts associated with the proposed action.

CONCLUSION

The proposed project may affect, but is not likely to adversely affect, the RCW, FFS, eastern indigo snake, or wood stork. The proposed project will not affect the shortnose sturgeon because

habitat in the action area is not suitable for this species. Critical habitat has been proposed for the FFS, but no FFS critical habitat was proposed for designation on Fort Stewart. Other listed species that occur on Fort Stewart have no critical habitat designated, so no critical habitat will be destroyed or modified adversely. The Army did not draw on the regulatory definition of destruction or adverse modification of critical habitat at 50 CFR 402.02 with respect to the conclusions and analysis made in this BA. Instead, the Army has incorporated into the critical habitat effects analysis the conservation of species principals found in the statutory provisions of the Endangered Species Act.

Figure 2. RCW Trees, Partitions, and HMU affected by the new UPROW, FS, GA.

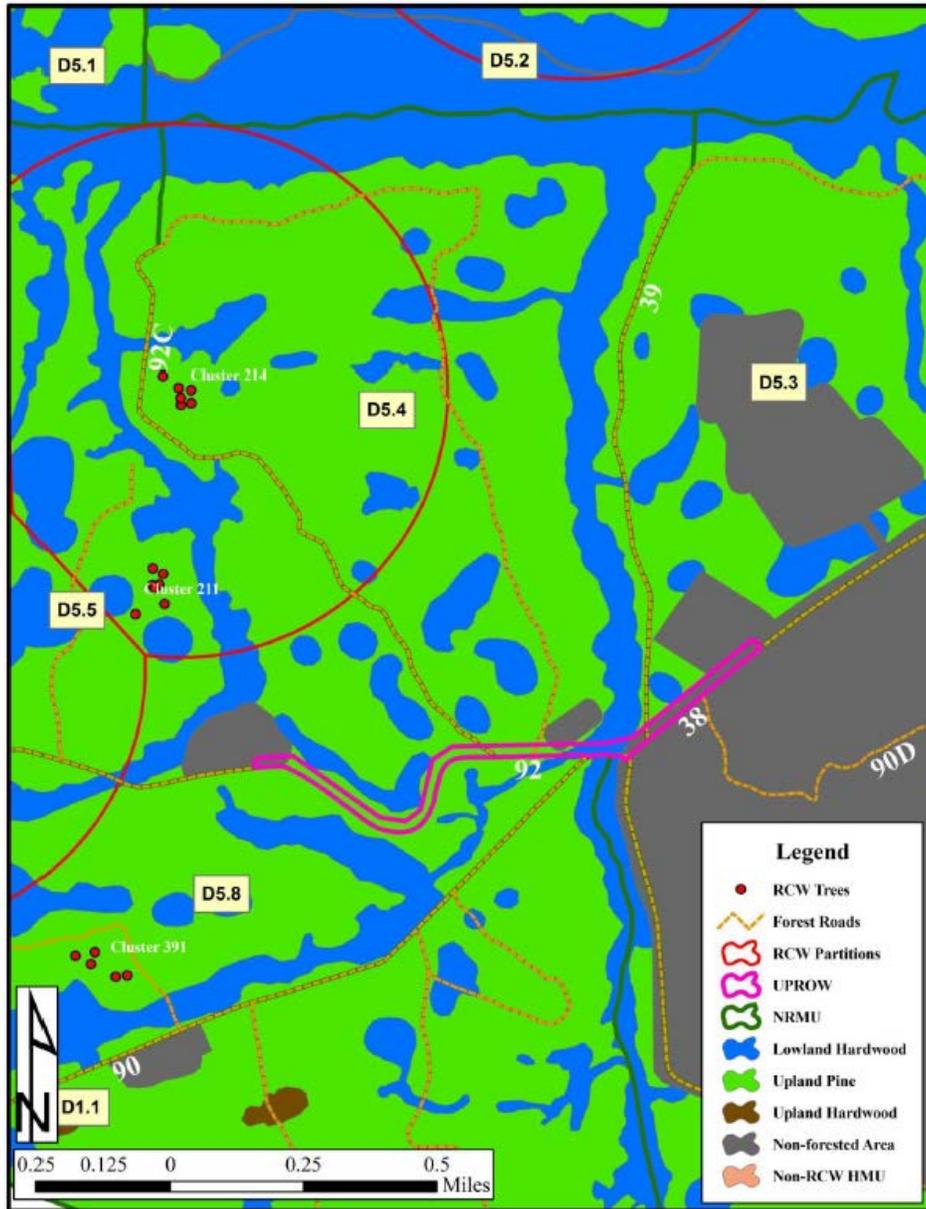
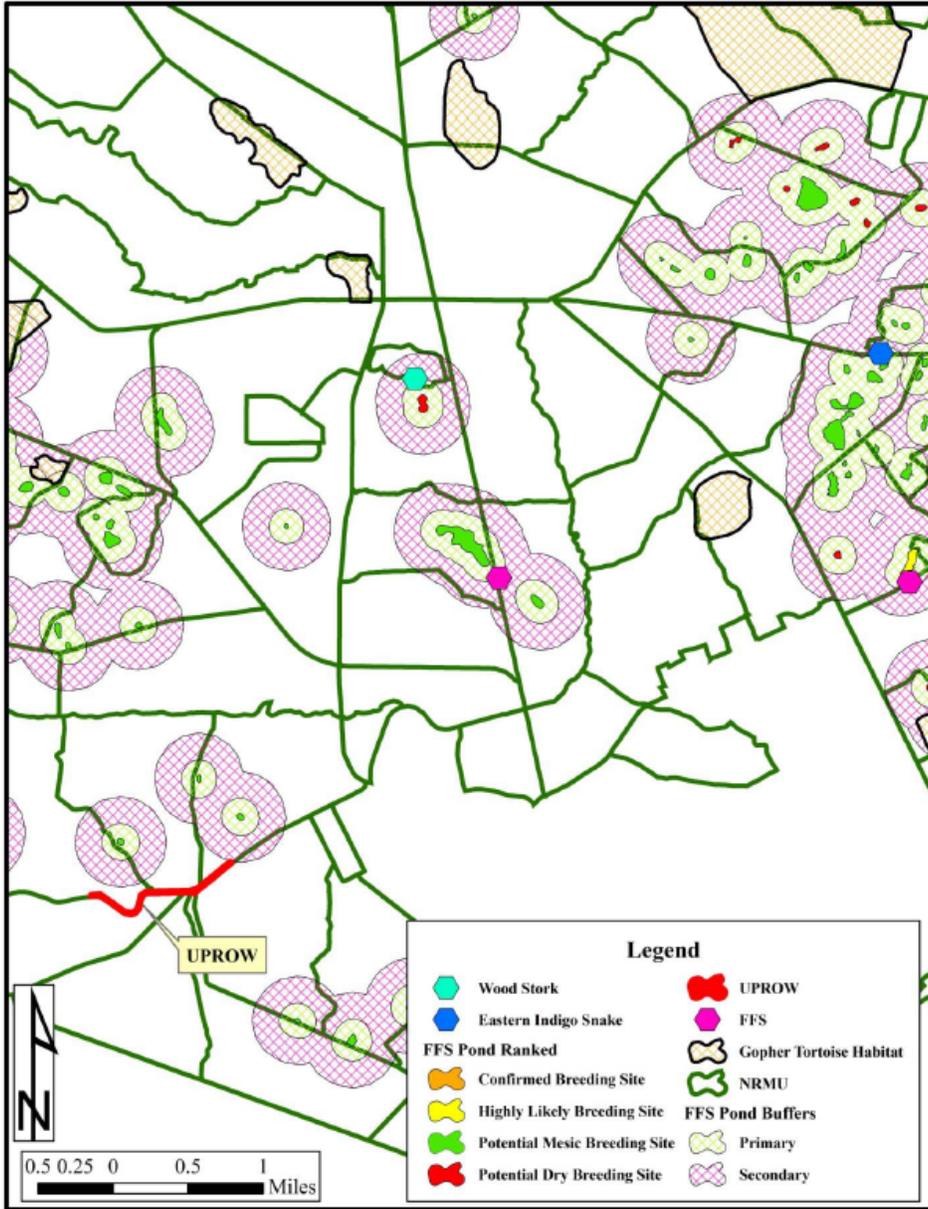


Figure 3. TES locations near the UPROW, FS, GA.



LITERATURE CITED

Directorate of Public Works. 2001. Integrated Natural Resources Management Plan, 2001-2005. 172 pp. plus appendices.



United States Department of the Interior

Fish and Wildlife Service

105 West Park Drive, Suite D
Athens, Georgia 30606
Phone: (706) 613-9493
Fax: (706) 613-6059

West Georgia Sub-Office
Post Office Box 52560
Fort Benning, Georgia 31995-2560
Phone: (706) 544-6428
Fax: (706) 544-6419

Coastal Sub-Office
4980 Wildlife Drive
Townsend, Georgia 31331
Phone: (912) 832-8739
Fax: (912) 832-8744

May 10, 2012

Mr. Robert R. Baumgardt
U.S. Army Installation Management Command
Directorate of Public Works
1587 Frank Cochran Drive
Fort Stewart, Georgia 31314-5048
Attn: Mr. Tim Beaty

Re: USFWS Log #2012-I-0438

Dear Mr. Baumgardt:

Thank you for your recent letter and attached biological assessment and map concerning the need to move the proposed Combat Pistol Qualification Course in Training Area D-5 five miles west to avoid impacting wetland areas on Fort Stewart, Georgia. A total of 12.3 acres will be clearcut in this new proposed action. We have reviewed the information you provided and submit the following comments under provisions of the Endangered Species Act of 1973 (ESA), as amended; (16 U.S.C. 1531 *et seq.*).

According to the information you provided, the project will impact only a total of about 12.3 acres of existing red-cockaded woodpecker (RCW) Habitat Management Unit. The nearest known occurrence of an Eastern indigo snake is 6.3 miles northeast of the action area. The nearest historical sighting of a frosted flatwoods salamander is 3.4 miles northeast of the proposed project. The nearest known sighting of foraging wood storks is at least 4.0 miles southwest of the project site. Therefore, due to the small amount of habitat that will be impacted by the proposed project, we agree with your determination that this proposed project is not likely to adversely affect any federally listed endangered or threatened species. Also, we believe that the requirements of section 7 of the ESA have been satisfied and no further consultation is required. However, obligations under section 7 of the ESA must be reconsidered if: (1) new information reveals impacts of this identified action that may affect listed species or critical habitat in a manner not previously considered; (2) this action is subsequently modified in a manner which was not considered in this assessment; or (3) a new species is listed or critical habitat determined that may be affected by the identified action.

We appreciate the opportunity to comment during the planning stages of your project. If you have any questions, please contact Robert Brooks of our Coastal Georgia Office at 912-832-8739, extension 107.

Sincerely,

Sandra S. Tucker

Sandra S. Tucker
Field Supervisor



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, US ARMY GARRISON, FORT STEWART / HUNTER ARMY AIRFIELD
DIRECTORATE OF PUBLIC WORKS
1587 FRANK COCHRAN DRIVE
FORT STEWART, GEORGIA 31314

Directorate of Public Works

MAR 06 2012

U.S. Department of the Interior
Fish and Wildlife Service
Georgia Ecological Field Services Field Office
4980 Wildlife Drive, NE
Townsend, Georgia 31331

Dear Ms. Tucker:

Reference FWS Log No: 2010-0137, the Biological Opinion (BO) on the Proposed Construction of 12 New Ranges and an Unmanned Aerial System on Fort Stewart, Georgia. A Range Operation and Control Area (ROCA) has been added to the Combat Pistol Qualification Course (CPQC) scheduled for construction in Fort Stewart Training Area (FSTA) Delta 5. This addition would cause an impact to jurisdictional wetlands as originally sited. To avoid this impact the footprint for the CPQC and ROCA will be moved 0.5 miles west (Figure 1). This modification of our original assessment accounts for the move and additional acreage needed for construction of the ROCA and the accompanying earthen berm.

Our original conclusion of the affect of the action on the RCW and other species remains unchanged, i.e., the proposed action may affect, but is unlikely to adversely affect the RCW, frosted flatwoods salamander, wood stork, or eastern indigo snake. The proposed action will not affect the shortnose sturgeon. The original conclusion regarding critical habitat also remains unchanged. If additional information is needed, please contact Mr. Tim Beaty, DPW, Environmental Division, Fish and Wildlife Branch, at telephone (912) 767-7261. Your continued cooperation and assistance are appreciated.

Sincerely,

Robert R. Baumgardt
Director, Public Works

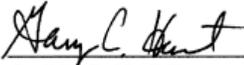
Enclosures

BIOLOGICAL ASSESSMENT

Modification to move the FY13 Combat Pistol Qualification Course from Delta 5.4 to Delta 5.5

Fort Stewart, Georgia

Prepared By:



GARY C. HART
Wildlife Biologist
Fish and Wildlife Branch
Environmental Division
Directorate of Public Works
Fort Stewart, GA

Reviewed By:



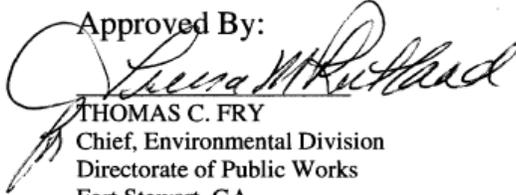
LAWRENCE D. CARLILE
Chief, Planning and Monitoring
Fish and Wildlife Branch
Environmental Division
Directorate of Public Works
Fort Stewart, GA

Submitted By:



TIMOTHY A. BEATY
Chief, Fish and Wildlife Branch
Environmental Division
Directorate of Public Works
Fort Stewart, GA

Approved By:



THOMAS C. FRY
Chief, Environmental Division
Directorate of Public Works
Fort Stewart, GA

PROJECT DESCRIPTION

Fort Stewart (FS) proposes to move the FY13 Combat Pistol Qualification Course (CPQC) site in FS Training Area (TA) Delta 5 (Figure 1). A Range Operation and Control Area (ROCA) has been added to this project and would cause an impact to jurisdictional wetlands as originally sited. The facility will therefore be moved 0.5 miles west to avoid this impact. Primary facilities include the CPQC, site development, range operations tower, general instruction building, range operations and storage building, ammunition breakdown building, covered mess, bleacher enclosure, latrine, and an earthen berm.

SITE DESCRIPTIONS

Forested habitat within the proposed action area is composed of a canopy dominated by longleaf pine (*Pinus palustris*) and slash pine (*P. elliottii*), with a mid-story of sweetgum (*Liquidambar styraciflua*), water oak (*Quercus nigra*), live oak (*Q. virginiana*), wax myrtle (*Myrica cerifera*), and red bay (*Persea borbonia*). The groundcover is characterized by saw palmetto (*Serenoa repens*), gallberry (*Ilex glabra*), shiny blueberry (*Vaccinium myrsinites*), and rusty lyonia (*Lyonia ferruginea*). Wetland systems adjacent to the proposed project are dominated by pond cypress (*Taxodium ascendens*), blackgum (*Nyssa sylvatica*), pond pine (*P. serotina*), and red maple (*Acer rubrum*). The soil types within the project area are Mascotte fine sand and Ellabelle loamy sand.

SPECIES CONSIDERED

The following species occur, or may occur, in the proposed action area and were considered in this assessment:

Red-cockaded woodpecker (*Picoides borealis*) - Endangered
Eastern indigo snake (*Drymarchon couperi*) - Threatened
Frosted flatwoods salamander (*Ambystoma cingulatum*) - Threatened
Shortnose sturgeon (*Acipenser brevirostrum*) - Endangered
Wood stork (*Mycteria americana*) - Endangered

DISCUSSION

Red-cockaded Woodpecker

The 4.0 acres that would have been removed from the original site will not be cut. This acreage will be added back to the FS red-cockaded woodpecker (RCW) Habitat Management Unit (HMU). The new project site will require the removal of 12.3 acres of RCW HMU and will consist of clear-cutting, grubbing, grading, and future maintenance for the CPQC, ROCA and earthen berm (Figure 2). The berm will be built during construction of the CPQC and will provide down range protection for RCW HMU and the trees of Clusters 211(inactive) and 214 (active; Figure 2). The nearest forage partition to the project area remains Cluster 214 which is now 0.1 miles north of the area (Figure 2).

To summarize the impacts of the proposed modification of the project on the RCW: 4.0 acres will be returned and 12.3 acres will be removed from the RCW HMU in FSTA Delta 5. The

proposed project may affect, but is not likely to adversely affect the RCW, nor will it prevent the Installation from achieving its recovery goal of 350 potential breeding groups (PBGs). Ongoing management and monitoring programs at the Installation have resulted in a well-documented population increase with ample habitat to support continued growth to achieve population recovery circa 2014.

Eastern Indigo Snake

The project area does not lie within the FS eastern indigo snake HMU. No eastern indigo snakes have ever been detected in the project area. The nearest known occurrence of an eastern indigo snake is 6.3 miles northeast of the action area in FSTA Bravo 4 (Figure 3). This project will not impact gopher tortoise habitat. The nearest gopher tortoise habitat is 2.6 miles north of the project area in FSTA Delta 6.1 (Figure 3). The proposed project may affect, but is not likely to adversely affect eastern indigo snakes.

Frosted Flatwoods Salamander

The entire proposed action area lies within the Fort Stewart frosted flatwoods salamander (FFS) HMU but will not impact any potential FFS breeding ponds or their associated buffers. No FFS have ever been detected in the action area. The nearest historical sighting of a FFS is approximately 3.4 miles northeast of the action area in FSTA Bravo 6 (Figure 3). Because of its distance from confirmed FFS sightings, the proposed project may affect, but is not likely to adversely affect the FFS or the landscape's ability to support FFS.

Wood Stork

No wood storks were observed in the proposed project area, nor have they been observed foraging in the action area. The proposed action will not impact wetlands. The nearest area where foraging wood storks have been observed is approximately 4.0 miles northeast of the action area in Pond 34 (Figure 3). The proposed project may affect, but is not likely to adversely affect wood storks.

Shortnose Sturgeon

Telemetry and capture data, which was collected as part of Fort Stewart's shortnose sturgeon monitoring program, indicate these fish do not travel >2 miles up the Canoochee River or 20 miles up the Ogeechee River from the Canoochee/Ogeechee River confluence. The Canoochee River flows diagonally through the Installation while the Ogeechee River forms much of the Installation's eastern boundary. The proposed project lies >15 miles west of the nearest shortnose sturgeon occurrence on the Canoochee River. Project design will incorporate protections measures as required by the Clean Water Act and the Georgia Erosion and Sedimentation Control Act to ensure appropriate wetland and stream protection. Due to the distance of documented sturgeon sightings from the proposed project area and the above mentioned protection measures, this action will not affect the shortnose sturgeon.

CUMULATIVE EFFECTS

There are no foreseeable state, local, tribal, or private actions that would have a cumulative adverse effect when combined with impacts associated with the proposed action.

CONCLUSION

The proposed project may affect, but is not likely to adversely affect, the RCW, FFS, eastern indigo snake, or wood stork. The proposed project will not affect the shortnose sturgeon because habitat in the action area is not suitable for this species. Critical habitat has been proposed for the FFS, but no FFS critical habitat was proposed for designation on Fort Stewart. Other listed species that occur on Fort Stewart have no critical habitat designated, so no critical habitat will be destroyed or modified adversely. The Army did not draw on the regulatory definition of destruction or adverse modification of critical habitat at 50 CFR 402.02 with respect to the conclusions and analysis made in this BA. Instead, the Army has incorporated into the critical habitat effects analysis the conservation of species principals found in the statutory provisions of the Endangered Species Act.

Figure 1. The original and new CPQC locations, FS, GA.

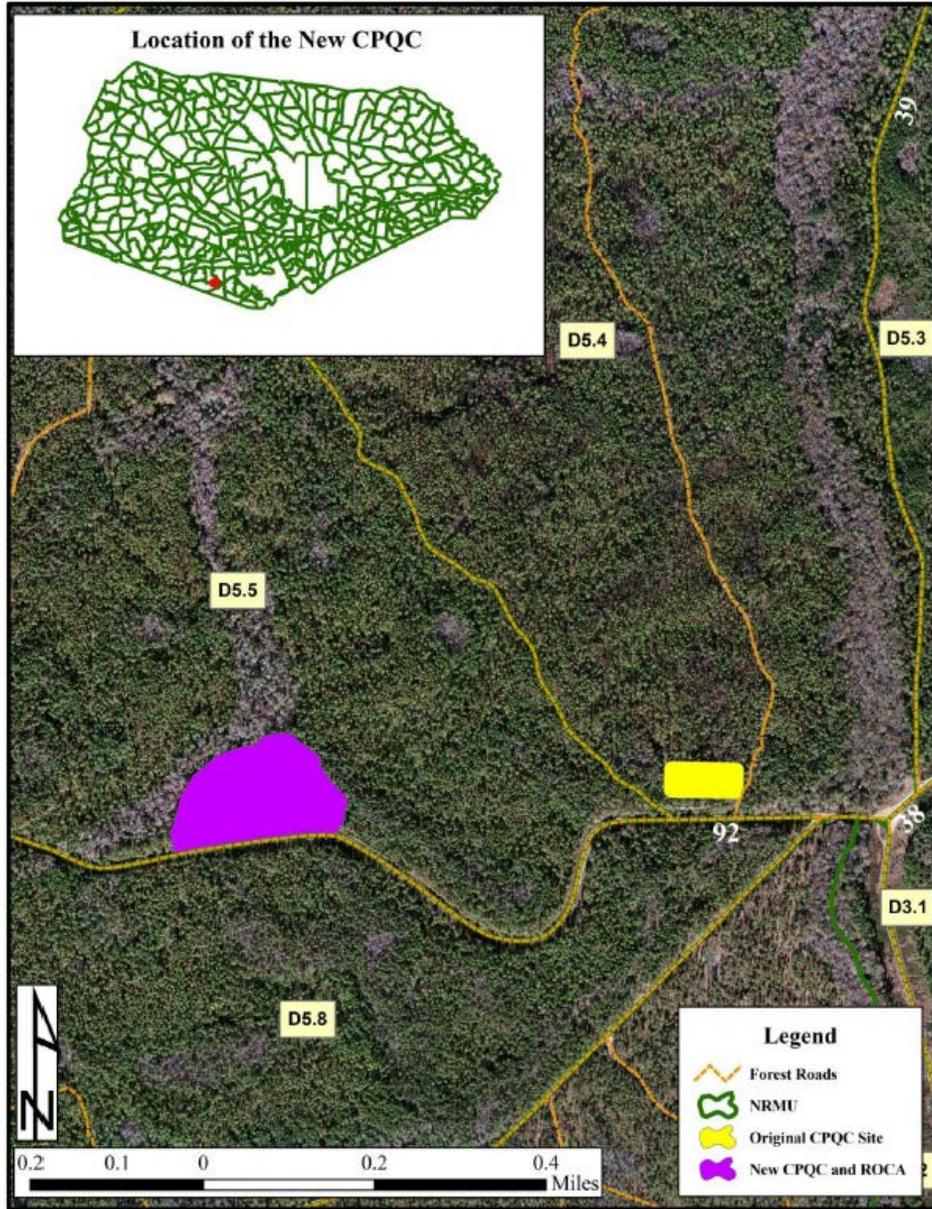


Figure 2. RCW Trees, Partitions and HMU affected by the new CPQC, FS, GA.

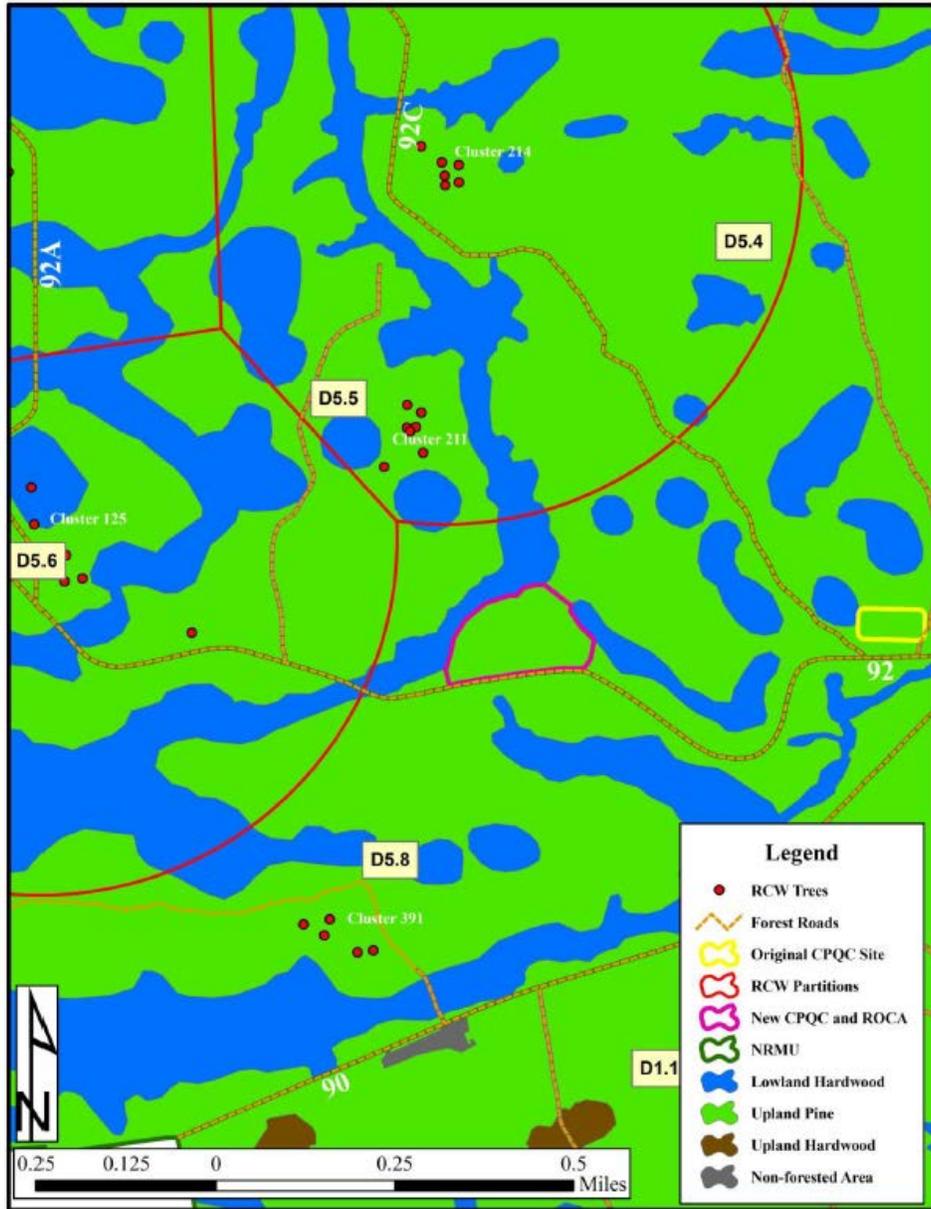
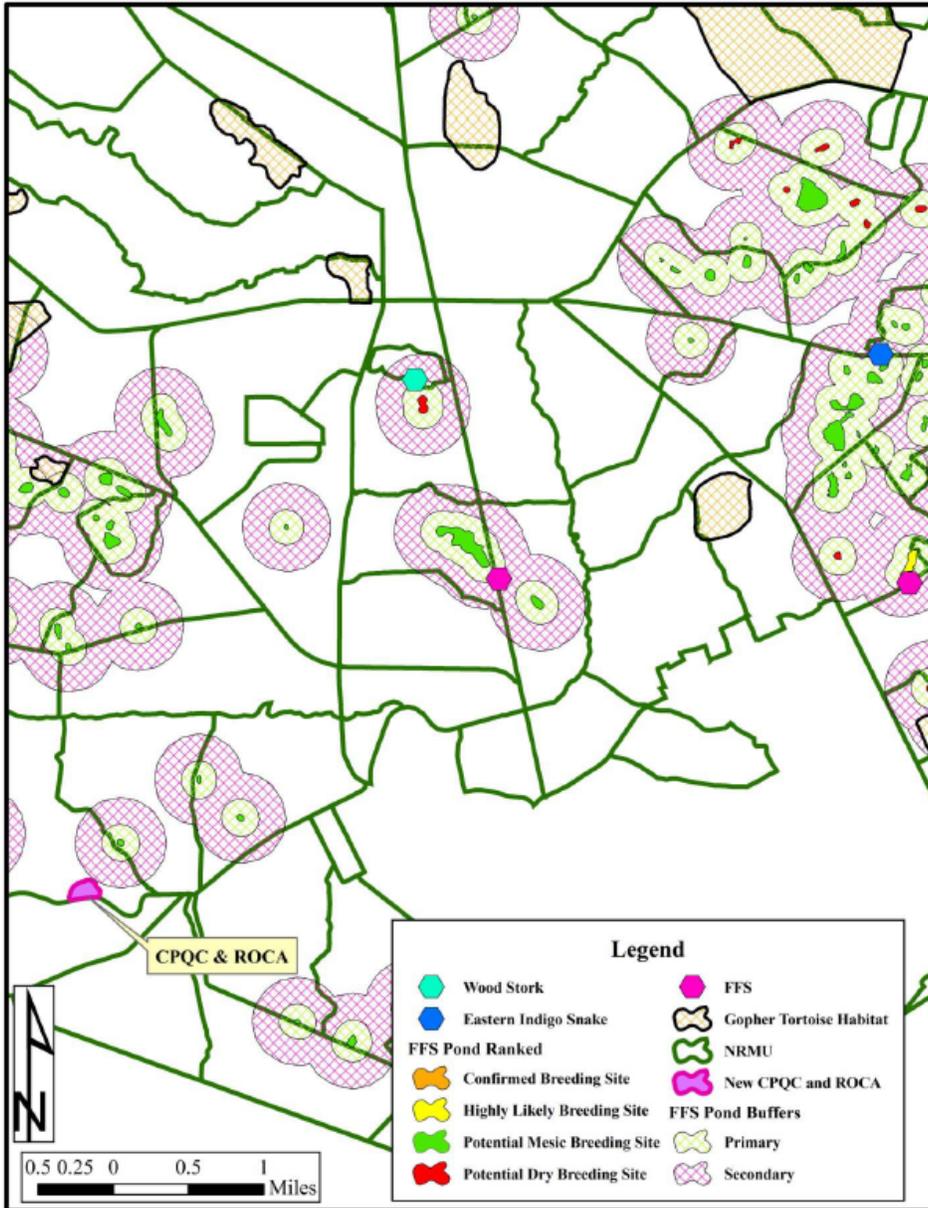


Figure 3. TES concerns affected by the new CPQC, FS, GA.



LITERATURE CITED

Directorate of Public Works. 2001. Integrated Natural Resources Management Plan, 2001-2005. 172 pp. plus appendices.

APPENDIX C

Georgia State Historic Preservation Office Consultation



HISTORIC PRESERVATION DIVISION

MARK WILLIAMS
COMMISSIONER

DR. DAVID CRASS
DIVISION DIRECTOR

August 2, 2012

Robert R. Baumgardt
Director, Public Works
Department of the Army
Fort Stewart/Hunter Army Airfield
1587 Frank Cochran Drive
Fort Stewart, Georgia 31314
Attn: Brian Greer, brian.greer@us.army.mil

**RE: Ft. Stewart: Range & Garrison Development, 15 Projects, 2011-2014
Liberty County, Georgia
HP-091222-001**

Dear Mr. Baumgardt:

The Historic Preservation Division (HPD) has reviewed the additional information provided regarding the above referenced project. Our comments are offered to assist the U.S. Department of the Army (Army) and Fort Stewart/Hunter Army Airfield in complying with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended.

Based on the additional information provided, HPD understands that the Army proposes to implement a footprint alteration to the FY13 Digital Multi-Purposes Training Range design and the addition of a communication corridor. HPD further understands that the Army proposes to implement a footprint alteration for the FY13 Combat Pistol Qualification Course design that includes an increased project area and the addition of a utility corridor. HPD agrees that these projects as proposed will continue to have no effect to archaeological or architectural properties that are listed on or eligible for listing on the National Register of Historic Places.

Please refer to project number HP-091222-001 in any future correspondence regarding this undertaking. If we may be of further assistance, please do not hesitate to contact me at (404) 651-6624 or via email at Elizabeth.shirk@dnr.state.ga.us.

Sincerely,

A handwritten signature in blue ink that reads "Elizabeth Shirk".

Elizabeth (Betsy) Shirk
Environmental Review Coordinator



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, US ARMY GARRISON, FORT STEWART / HUNTER ARMY AIRFIELD
DIRECTORATE OF PUBLIC WORKS
1587 VETERANS PARKWAY
FORT STEWART, GEORGIA 31314

REPLY TO
ATTENTION OF

Office of the Directorate

Dr. David Crass
Deputy State Historic Preservation Officer
Historic Preservation Division
Georgia Department of Natural Resources
254 Washington Street SW
Ground Level
Atlanta, Georgia 30334

Dear Dr. Crass,

The purpose of this letter is to continue consultation with your office regarding the *Fort Stewart Range and Garrison Environmental Impact Statement's* (EIS) analysis of both the FY13 Digital Multi-Purpose Training Range (DMPTR) and the FY13 Automatic Combat Pistol Qualification Course (CPQC) in conjunction with the proposed actions outlined within the above document (Reference: Fort Stewart: Range & Garrison Development, 15 Projects, 2011-2014; Liberty County, Georgia; HP-091222-001).

Per your office's letter dated December 21, 2010, the Historic Preservation Division concurred with the Installation's findings and recommendations regarding archaeological resources and historic structures within the proposed DMPTR and CPQC designs. The Army proposes to implement a footprint alteration to the DMPTR design and the addition of a communication corridor. Figure 1 shows the No Action Alternative as was depicted in the EIS and Figure 2 depicts the Proposed Action Alternative for the new design and construction.

Due to the DMPTR's footprint alteration, seven archaeological resources will be affected by the proposed DMPTR design (Table A). In addition, buildings 18508 and 18510 are within the proposed footprint. Building 18508 (built 1975) was assessed by the 2002 building survey and determined ineligible for the NRHP. Building 18510 was constructed in 1999 and is also not eligible for the NRHP.

The proposed communication corridor shall extend along a portion of GA Highway 119. This addition will be contained within the existing disturbed right-of-way. This disturbed right-of-way is considered a categorical exclusion from survey requirements for previously disturbed public utilities and right-of-ways in accordance with the Installation's Programmatic Agreement with the State Historic Preservation Office. The NRHP eligible site of the town of Willie (9LI312) is located adjacent to the right-of-way. However this historic property's site boundary does not extend into the area of potential effect.

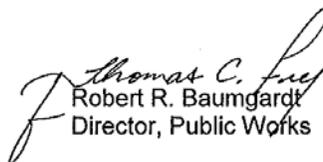
Thomas Hill Cemetery (9LI1591) is located within the proposed DMPTR Safety Danger Zone (SDZ), which coincides with the existing Red Cloud Foxtrot SDZ. A protective berm is already in place around Thomas Hill Cemetery and no impacts are anticipated. Routine monitoring of the cemetery is conducted by Fort Stewart CRM personnel to assess any impacts that may occur during operations of this range.

The Army also proposes to implement a footprint alteration for the CPQC design. The new proposal includes an increased project area and the addition of an utility corridor. Figure 3 shows the No Action Alternative as was shown in the EIS and Figure 4 shows the Proposed Action Alternative for the new design and construction. The CPQC's original project location has been moved within Training Area D5 and a utility corridor has been added. The proposed footprint was surveyed by Fort Stewart CRM personnel during Fiscal Year 2010 (Greer et al. 2011). No archaeological resources or buildings will be affected by the proposed CPQC design. The proposed utility corridor will be installed along Fort Stewart Road 92. This corridor will be confined to the existing disturbed right-of-way. The disturbed right-of-way is considered a categorical exclusion from survey requirements for right-of-ways in accordance with the Installation's Programmatic Agreement.

The Army is preparing a Supplemental Environmental Assessment (EA) for the proposed modifications. The Draft EA and Draft Finding of No Significant Impact will be mailed to your office for review. Cultural resource impact evaluations will be included as part of the EA, which will provide an opportunity for the public to comment on the proposed action's impact on cultural resources. Please note, this letter includes information regarding cultural resources that is excluded from the EA due to sensitivity of site location.

Per 36 CFR 800, the Army requests your comments within 30 days of receiving this letter. If you have any questions or require further information, please contact Mr. Brian Greer, DPW, Environmental Prevention & Compliance Branch, Cultural Resource Program Manager, at (912) 767-0992. Email correspondence may be directed to Brian.K.Greer2.ctr@mail.mil.

Sincerely,


Robert R. Baumgardt
Director, Public Works

Enclosures

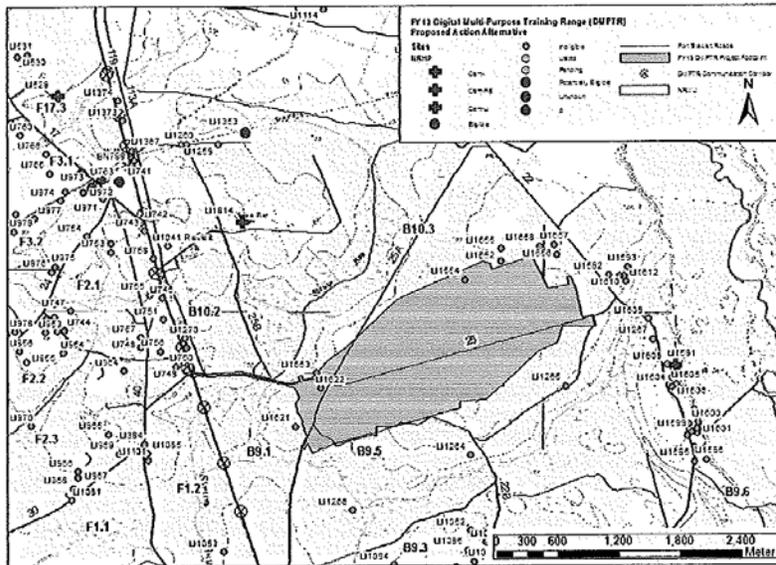


Figure 2: DMPTR – Proposed Action Alternative for the new design and construction.

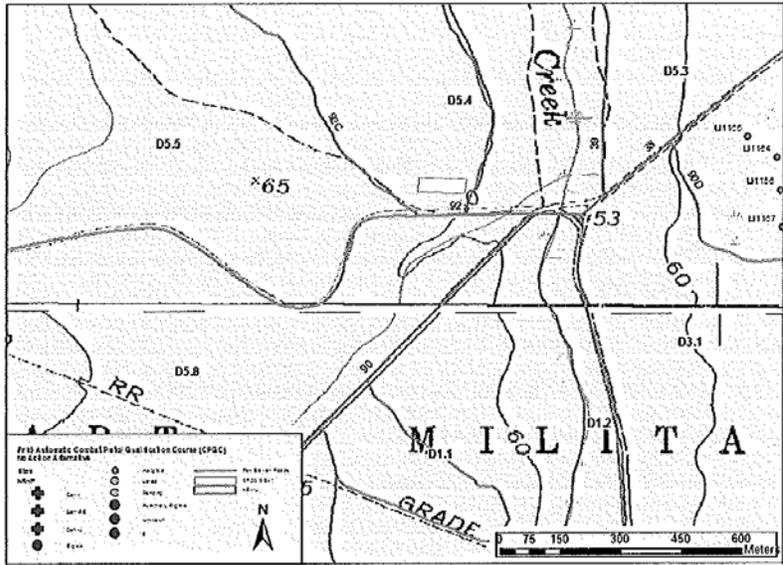


Fig. 3: CPQC – No Action Alternative as proposed in EIS.

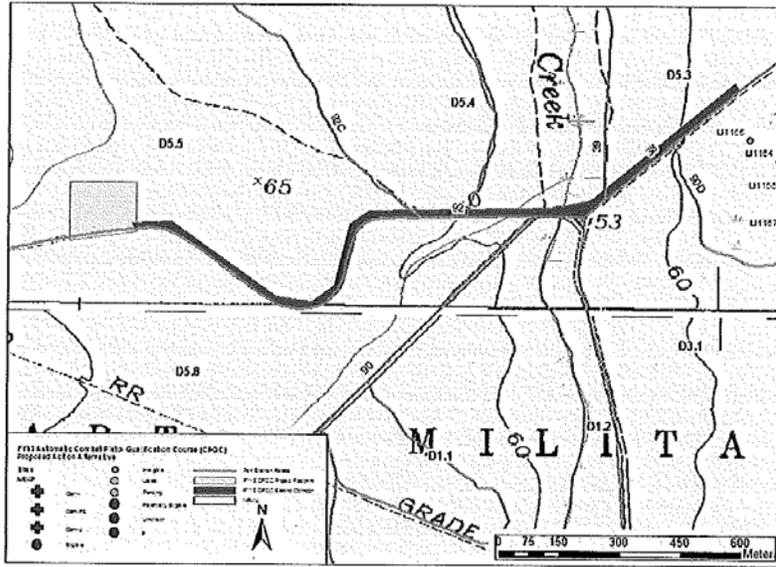


Fig. 4: CPQC – Proposed Action Alternative for the new design and construction.

TABLE A. Cultural Resources within 200m of the APE.

| Site # | NRHP Status | Site Description |
|---------------|--------------------|---|
| 9LI1621 | Ineligible | 9LI1621 is prehistoric lithic scatter discovered by Prentice Thomas & Associates, Inc. in 2005 and consists of chert flakes. |
| 9LI1622 | Ineligible | 9LI1622 is an unknown historic artifact scatter and prehistoric artifact scatter discovered by Prentice Thomas & Associates, Inc. in 2005 and consists of whiteware, lithic flakes, glass, metal, pot sherd, and brick fragments. |
| 9LI1652 | Ineligible | 9LI1652 is a late 19 th /early 20 th century historic scatter discovered by Fort Stewart personnel in 2008 and consists of glass, metal, coal slag, ironstone, and stoneware fragments. |
| 9LI1653 | Ineligible | 9LI1653 is a late 19 th /early 20 th century historic scatter discovered by Fort Stewart personnel in 2008 and consists of glass fragments. |
| 9LI1654 | Ineligible | 9LI1654 is a late 19 th /early 20 th century historic scatter discovered by Fort Stewart personnel in 2008 and consists of glass, metal, coal slag, ironstone, and stoneware fragment. |
| 9LI1655 | Ineligible | 9LI1655 is a late 19 th /early 20 th century historic scatter discovered by Fort Stewart personnel in 2008 and consists of glass, ironstone, and porcelain fragments. |
| 9LI1658 | Ineligible | 9LI1658 is a late 19 th century historic scatter discovered by Fort Stewart personnel in 2008 and consists of one quart amethyst bottle with two wire rings from top of bottle. |

APPENDIX

Other Regulatory Coordination and Consultation
