

# **FINAL ENVIRONMENTAL ASSESSMENT**

## **3<sup>RD</sup> INFANTRY DIVISION (3ID) HEAVY BRIGADE COMBAT TEAM (HBCT) COMPLEX AND UPGRADE TO TANK TRAIL**

### **FORT BENNING GEORGIA**


**June 2011**

**Garrison, US Army Maneuver Center of Excellence  
Fort Benning, Georgia  
In compliance with the National Environmental Policy Act of 1969**

# **FINAL ENVIRONMENTAL ASSESSMENT**

## **3<sup>RD</sup> INFANTRY DIVISION (3ID) HEAVY BRIGADE COMBAT TEAM (HBCT) COMPLEX AND UPGRADE TO TANK TRAIL**

**Prepared by:  
SAVANNAH DISTRICT  
U.S. ARMY CORPS OF ENGINEERS**



---

**JEFFREY FLETCHER**  
Colonel, AG  
Garrison Commander

## **SUMMARY**

### **INTRODUCTION**

This Environmental Assessment (EA) evaluates the proposal of the Department of the Army (DA) to implement the Proposed Heavy Brigade Combat Team (HBCT) Action at Fort Benning, Georgia. Under the Proposed HBCT Action, Fort Benning would construct, operate and maintain an Army standard design TEMF and Heavy Brigade Combat Team Complex. The Kelley Hill and Ochillee tank trails would also be upgraded in this Proposed HBCT Action. This Proposed Action would improve training and other military operations, notably in concert with the establishment of the Maneuver Center of Excellence (MCoE).

As required by the National Environmental Policy Act of 1969 (NEPA; 42 US Code [USC] 4321 *et seq.*), the Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Part 1500-1508), and the Army NEPA Regulation (*Environmental Analysis of Army Actions*, Final Rule; 32 CFR Part 651, 1 January 2007), the potential environmental and socioeconomic effects of this Federal Proposed HBCT Action are analyzed in this EA.

NEPA and Federal implementing regulations collectively establish a process by which Fort Benning considers the potential environmental impacts of its proposed actions and invites the involvement of interested members of the public prior to deciding on a final course of action. As such, this EA will facilitate the decision-making process regarding the Proposed HBCT Action and its considered alternatives. This EA will also provide the basis for determining if a Finding of No Significant Impact (FNSI) with some mitigation is appropriate, or if an Environmental Impact Statement (EIS) is required in accordance with the above regulations.

### **PROPOSED ACTION**

Under the Proposed HBCT Action, Fort Benning would construct, operate, and maintain an Army standard design Brigade Combat Team (Heavy) Complex in support of the purpose and need as described in this EA. The main complex would consist of a Tactical Equipment Maintenance Facility (TEMF); arms room; organizational storage buildings; access roads; hazardous waste storage; oil storage; shop aprons; tank trails; organizational vehicle parking and an unmanned aerial vehicle (UAV) maintenance hangar. All of the construction activities for the HBCT Complex would occur within the boundaries of Fort Benning in the Kelley Hill Cantonment Area.

This Proposed HBCT Action includes the repair and upgrade of the existing tank trail infrastructure that starts in the Kelley Hill Cantonment Area and runs eastward towards the Ochillee Railhead Loading Facility near the Harmony Church area. The Kelley Hill and Ochillee Tank Trails will be repaved and repaired with concrete to maintain the operational efficiency of the trails. Additionally, a number of erosion prevention measures would be constructed to help

minimize erosion and potential sedimentation impacts to surface water resources from storm water events in the future.

In addition, demolition of 29 buildings and structures totaling approximately 61,300 square feet will also occur as part of the Proposed HBCT Action. The current facilities and structures, (e.g. grease racks, oils storage buildings, maintenance shops, etc.), proposed for demolition will no longer be needed as they will be replaced with the newer and updated facilities for the operation of the Proposed HBCT Complex. As the majority of these facilities were constructed in the 1950's, it is assumed that lead-based paint (LBP) and asbestos containing materials (ACM) are present. All buildings and structures will be inspected for LBP and ACM prior to any demolition activities. All building materials and wastes generated prior to and during demolition would be disposed of in accordance with all applicable Federal, State and Army regulations.

## **PURPOSE AND NEED**

The Proposed HBCT Action is needed to provide adequate unit maintenance facilities to support the reorganization and stationing of a Heavy Brigade Combat Team at Kelley Hill. Per the Department of Army Modularity Order, the 3<sup>rd</sup> Infantry Division (Mechanized) is being reorganized as part of the Army's Transformation. The 3<sup>rd</sup> Heavy Brigade Combat Team (HBCT) 3<sup>rd</sup> Infantry Division (3<sup>rd</sup> ID) currently occupies existing maintenance and operations facilities in the Kelley Hill Cantonment Area on Fort Benning. The existing brigade is transforming from three battalions into six battalions, and is being fully populated with existing personnel and newly trained Soldiers. The existing tactical equipment maintenance structures are not capable of supporting the growth of the 3<sup>rd</sup> ID that will result in more personnel and military vehicles.

Currently, there are two company-sized motorpools with vehicle maintenance facilities that were constructed in the 1950's. These existing facilities have become inadequate for maintenance operations due to outdated design features and are unable to accommodate the size and maintenance requirements of current standard military vehicles. In addition, these facilities do not meet current electrical and mechanical codes.

Under current conditions, there are not enough vehicle maintenance facilities to accommodate the Proposed HBCT Action. The unit would be required to continue to use the existing with substandard outdated facilities for maintenance operations. Additionally, the existing tank trails are not structurally sufficient to maintain the anticipated increase in operational tempo, and would need to be upgraded and repaired to sustain training and operations.

The Proposed HBCT Complex was originally identified in two previous NEPA documents: The BRAC 2005 and Transformation Actions at Fort Benning, Georgia (October 2007), and The Maneuver Center of Excellence (MCoE) at Fort Benning, Georgia (June 2009). The Proposed HBCT Complex was initially to be located in the Harmony Church Cantonment Area in conjunction with support facilities for the relocation of the Armor School. However, this original siting was not centrally located to support the main functions and operations of the 3<sup>rd</sup> ID HBCT. As the Kelley Hill Cantonment Area acts as the "Command and Control" center for the 3<sup>rd</sup>

Brigade, centrally locating the HBCT Complex to the operations and training centers for the 3<sup>rd</sup> ID would reduce the expense of having to move military equipment and Soldiers for maintenance and training operations.

## **PROPOSED HBCT ALTERNATIVES**

The NEPA, CEQ, and the Army NEPA Regulation require a range of reasonable alternatives to be considered and evaluated. Alternatives that are eliminated from detailed analysis must be identified along with a brief discussion of the reasons for eliminating them. For purposes of analysis, an alternative was considered “reasonable” only if it would enable Fort Benning to accomplish the primary mission of providing an *adequate*, on-Post maintenance shop complex to include a TEMF and other maintenance support facilities necessary for the 3ID HBCT. A reasonable alternative must meet the purpose of and need for the Proposed HBCT Action. “Unreasonable” alternatives would not enable Fort Benning to meet the purpose of and need for the Proposed Action and therefore are not fully analyzed in this EA.

The Army used screening criteria to determine which Alternatives are reasonable. Satisfaction of these screening criteria would provide a location suited to meet the purpose of and need for the Proposed HBCT Action, while potentially minimizing adverse environmental and operational effects. Screening criteria used for this Proposed HBCT Action consisted of:

- **Use of Previously Disturbed Areas:** should be located within existing or previously disturbed or previously "approved" construction areas.
- **RCW (Federal-listed species) Impact Minimization:** should minimize impacts to RCWs and their habitat.
- **Environmentally Sensitive Area Impact Minimization:** should be sited to minimize impacts to NRHP-eligible cultural resources sites and environmentally sensitive areas.
- **Training Compatibility:** should be located in areas that do not conflict with or limit training.
- **Location and Proximity:** should be centrally located to support operations, training, and mission needs for the 3<sup>rd</sup> ID.

Three alternatives were identified as “reasonable” to meet the purpose and need of the Proposed HBCT Action. The No Action Alternative is also discussed below.

**Alternative 3 (Preferred Alternative):** The proposed location for this Alternative is directly northwest of the Kelley Hill Cantonment Area. The total proposed acreage impacted by this Alternative projection is 236 acres. This total acreage also includes the repair and upgrade to the Kelley Hill and Ochillee Tank Trails. It is further projected that construction of the HBCT complex could affect approximately 71 acres of pine plantation that is approximately

5-years in age, and is not designated as current or future potential habitat for the Red-cockaded Woodpecker (RCW).

**Alternative 2:** The proposed location for the Alternative is directly north of the Kelley Hill Cantonment Area. The total proposed acreage impacted by this alternative projection is 319 acres. This total acreage also includes the repair and upgrade to the Kelley Hill and Ochillee Tank Trails. It is further projected that construction of the HBCT complex could affect approximately 147 acres of pine plantation that is roughly 22-years in age, and is designated as future potential habitat for RCWs.

**Alternative 1:** The proposed location for this Alternative is directly northeast of the Kelley Hill Cantonment Area. The total proposed acreage impacted by this alternative projection is 245 acres. This total acreage also includes the repair and upgrade to the Kelley Hill and Ochillee Tank Trails. It is further projected that construction of the HBCT complex could affect approximately 62 acres of mature pine plantation that is approximately 60 to 90-years in age, and is designated as future habitat for RCWs.

**No Action Alternative:** Under this Alternative, the Proposed HBCT Action would not be implemented. Current training and maintenance activities would continue to be performed in out-dated, inadequate facilities that are currently used for equipment maintenance and training. The existing Kelley Hill and Ochillee Tank Trails would not be repaired or upgraded, and could potentially decrease the operational efficiency of the 3<sup>rd</sup> ID.

While the No Action Alternative would not satisfy the purpose or need for the Proposed HBCT Action, this alternative was retained to provide a comparative baseline against which to analyze the effects of the Proposed HBCT Action, as required under the CEQ Regulations (40 CFR 1502.14). The No Action Alternative reflects the *status quo* and serves as a benchmark against which the effects of the Proposed HBCT Action can be evaluated.

## ENVIRONMENTAL CONSEQUENCES

The existing condition of the environmental resources at Fort Benning potentially affected by each of the three considered Alternatives and consequences of their implementation is presented in **Section 4**. Analysis consists of a comparison of each Alternative and the potential environmental effects to each environmental resources area, or Valued Environmental Component (VEC). **Section 5** presents an analysis of the potential cumulative effects from implementing any of the Action Alternatives and the No Action Alternative. Mitigation measures for potential adverse effects to VECs are identified where applicable.

Analysis of the HBCT Action Alternatives, resulted in a finding of *short-term, minor and moderate adverse effects* on *Soils, Water Resources and Wetlands, Biological Resources, Cultural Resources, and Hazardous and Toxic Materials and Waste (HTMW)*. These *minor and moderate adverse impacts* do not contribute to significant adverse cumulative effects when considering all other past, present, and reasonably foreseeable future projects at Fort Benning.

The EA analysis demonstrated that with adherence to applicable federal and state environmental laws, regulations, and permitting processes no significant adverse environmental impacts would result from the implementation of any of the Action Alternatives.

In accordance with Army NEPA Regulations, the Army must indicate if any mitigation measures are needed to minimize potential adverse effects. Prior to any construction activities, the proponent will be required to use the Fort Benning environmental review process to ensure that known environmental conditions have not changed, and to provide the proponent guidance in adhering to all Federal and State laws and regulations, as well as Army requirements. Under each of the Proposed Action Alternatives, mitigation measures would be proposed for potential impacts to *Soils, Water Resources and Wetlands, Biological Resources, Cultural Resources, and Hazardous and Toxic Materials and Waste*. No other resource impacts would require mitigation.

In summary, the proposed *Soils and Water Resources and Wetlands* mitigation measures would be:

- Application of Federal and State erosion control measures and NPDES permitting requirements to include preparation of an ESPCP detailing erosion and sedimentation control BMPs, and a minimum 25-foot surface water setback to minimize soil impacts during construction would be required prior to any construction activities. Additionally, adherence to Federal and State laws and regulations, as well as Installation management plans, would minimize impacts due to training, operations, and maintenance activities in the long-term. Therefore, no additional mitigation measures are warranted.

In summary, the proposed *Biological Resources* mitigation measures would be:

- Construction activities would be limited within 200-feet of all RCW cluster trees during the 1 April through 31 July breeding season.
- To the extent possible, the proponent will plan construction activities to avoid primary nesting periods (April through July) of migratory birds protected under the MBTA.

In summary, the proposed *Cultural Resources* mitigation measures would be:

- Field determine and flag the boundaries of all eligible cultural resources sites within the proposed action locations and locate all project construction components at a minimum distance of 25 feet from the edge of all NRHP-eligible cultural resources sites.
- Minimization of adverse effects to avoid cultural sites through project design, if avoidance is not possible, then excavation and data recovery would be implemented.
- Construction activities would be monitored in the vicinity of NRHP-eligible cultural resources to ensure construction is conducted in accordance with the final design and

- In the event of an inadvertent discovery of human remains or cultural items during project construction, construction activities in that area shall be halted and the area cordoned off until the Fort Benning Cultural Resources Management is contacted to properly identify, and appropriately treat discovered items in accordance with applicable laws and regulations. As appropriate, notification of concerned Tribes would occur once a qualified archaeologist makes an initial determination.

In summary, the proposed *Hazardous and Toxic Materials and Waste* mitigation measures would be:

- During construction activities under all of the Action Alternatives, the handling, disposal, use, and storage of solid waste, (including HTMW), would be in accordance with all applicable Federal and State laws and requirements. All demolition, construction, and facility maintenance activities would comply with Fort Benning's Hazardous Waste Management Plan for addressing such materials. In addition, the required NPDES permit would prescribe measures to address potential spills during construction. Adherence to Federal and State laws and regulations, as well as Installation management plans, would minimize impacts due to demolition, construction, training, and maintenance operations activities in the long-term. Therefore, no additional mitigation measures are warranted.

## CONCLUSION

The analysis contained in this EA indicates that for the most part, any of the Action Alternatives would have only *short-term*, *minor* adverse effects to soils, water resources and wetlands, and HTMW due to demolition, construction, and operational activities associated with the implementation of the HBCT Complex and Ochiltee Tank Trail upgrade. Adherence to Federal and State laws and regulations, as well as Installation management plans, would minimize impacts due to demolition, construction, training, and maintenance operations activities in the *long-term*.

Under any of the Action Alternatives, *no adverse effects* to cultural resources within the Area of Potential Effect (APE) would occur during construction. No *long-term* effects to cultural resources would be anticipated, however, if any cultural site cannot be avoided through project design, it will be required to be mitigated through excavation and data recovery. There would be no *short-* or *long-term* adverse effects to architectural resources as the facilities proposed for demolition as part of this Proposed Action are not eligible for inclusion on the NHRP. Additionally, there are no known cemeteries or Tribal religious or cultural sites that would be affected by any of the Action Alternatives.

Potential impacts to RCWs for Alternative 3 would be *minor* as current pine plantations at this location have not been designated as current or future potential habitat. Potential impacts to RCWs for Alternatives 2 and 1 would be *moderate* as pine plantations at these locations are an older age class and have been designated as future potential habitat. No significant adverse impacts to any resources are anticipated either in a *long-* or *short-term* basis.



After evaluation of impacts it is concluded that the Preferred Alternative (Alternative 3), with its associated facility construction, demolition, and tank trail upgrades would meet the purpose and need for the 3<sup>rd</sup> ID HBCT Complex. The EA analysis demonstrated that with adherence to applicable Federal and State environmental laws, regulations, and permitting processes no significant adverse environmental impacts would result from the proposed action as implemented by Alternative 3.

The No Action Alternative would not meet the purpose and need for providing adequate maintenance facilities to support operations of the 3<sup>rd</sup> ID.

## TABLE OF CONTENTS

	Page No.
<b>1.0 PURPOSE AND NEED .....</b>	<b>1</b>
<b>1.1 INTRODUCTION.....</b>	<b>1</b>
<b>1.2 PURPOSE AND NEED.....</b>	<b>3</b>
<b>2.0 DESCRIPTION OF THE PROPOSED ACTION.....</b>	<b>6</b>
<b>2.1 INTRODUCTION.....</b>	<b>6</b>
<b>2.2 PROPOSED ACTION.....</b>	<b>6</b>
2.2.1 Mitigation Measures .....	7
<b>2.3 SCOPE OF THE ENVIRONMENTAL ASSESSMENT .....</b>	<b>8</b>
<b>2.4 DECISION MAKING .....</b>	<b>11</b>
<b>2.5 PUBLIC AND AGENCY INVOLVEMENT .....</b>	<b>11</b>
2.5.1 Public Review of the Final EA and Draft FNSI .....	11
2.5.2 Native American Consultation/Coordination .....	12
<b>2.6 REGULATORY FRAMEWORK .....</b>	<b>12</b>
<b>3.0 ALTERNATIVES CONSIDERED .....</b>	<b>14</b>
<b>3.1 INTRODUCTION.....</b>	<b>14</b>
<b>3.2 ALTERNATIVES DEVELOPMENT .....</b>	<b>14</b>
3.2.1 Screening Criteria .....	14
3.2.2 Application of Screening Criteria.....	15
<b>3.3 EVALUATED ALTERNATIVES .....</b>	<b>15</b>
3.3.1 Alternative 3 (Preferred Alternative).....	16
3.3.2 Alternative 2 .....	16
3.3.3 Alternative 1 .....	16
3.3.4 No Action Alternative.....	17
<b>3.4 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION.....</b>	<b>17</b>
<b>3.5 COMPARISONS OF THE POTENTIAL EFFECTS OF THE EVALUATED         ALTERNATIVES .....</b>	<b>17</b>

## TABLE OF CONTENTS (continued)

	Page No.
<b>4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES .....</b>	<b>20</b>
<b>4.1 INTRODUCTION.....</b>	<b>20</b>
<b>4.2 RESOURCES ANALYZED.....</b>	<b>20</b>
<b>4.3 RESOURCES ELIMINATED FROM FURTHER ANYALYSIS.....</b>	<b>20</b>
4.3.1 Land Use.....	20
4.3.2 Air Quality .....	21
4.3.3 Noise.....	22
4.3.4 Socioeconomics .....	23
4.3.5 Utilities.....	23
4.3.6 Transportation and Traffic .....	24
4.3.7 Airspace .....	25
<b>4.4 RESOURCES FULLY ANALYZED.....</b>	<b>25</b>
4.4.1 Soils .....	25
4.4.1.1 Affected Environment .....	26
4.4.1.2 Effects of Alternative 3 (Preferred Alternative)-----	27
4.4.1.3 Effects of Alternative 2-----	28
4.4.1.4 Effects of Alternative 1-----	28
4.4.1.5 Effects of the No Action Alternative -----	28
4.4.1.6 Mitigation Measures -----	28
4.4.2 Water Resources and Wetlands .....	28
4.4.2.1 Affected Environment .....	30
4.4.2.2 Effects of Alternative 3 (Preferred Alternative)-----	31
4.4.2.3 Effects of Alternative 2-----	31
4.4.2.4 Effects of Alternative 1-----	32
4.4.2.5 Effects of the No Action Alternative -----	32
4.4.2.6 Mitigation Measures -----	32
4.4.3 Biological Resources .....	33
4.4.3.1 Affected Environment .....	34
4.4.3.2 Effects of Alternative 3 (Preferred Alternative)-----	37
4.4.3.3 Effects of Alternative 2-----	37
4.4.3.4 Effects of Alternative 1-----	37
4.4.3.5 Effects of the No Action Alternative -----	38
4.4.3.6 Mitigation Measures -----	38
4.4.4 Cultural Resources.....	39
4.4.4.1 Affected Environment .....	40
4.4.4.2 Effects of Alternative 3 (Preferred Alternative)-----	41
4.4.4.3 Effects of Alternative 2-----	42
4.4.4.4 Effects of Alternative 1-----	42
4.4.4.5 Effects of the No Action Alternative -----	42

## TABLE OF CONTENTS (continued)

	Page No.
4.4.4.6 Mitigation Measures .....	42
4.4.5 Hazardous and Toxic Materials and Waste .....	43
4.4.5.1 Affected Environment .....	44
4.4.5.2 Effects of the Proposed HBCT Action Alternatives .....	44
4.4.5.3 Effects of the No Action Alternative .....	45
4.4.5.4 Mitigation Measures .....	45
<b>5.0 CUMULATIVE EFFECTS.....</b>	<b>46</b>
<b>5.1 INTRODUCTION.....</b>	<b>46</b>
<b>5.2 RECENT AND FORESEEABLE FUTURE PROJECTS IN THE REGION OF         INFLUENCE .....</b>	<b>46</b>
<b>5.3 CUMULATIVE EFFECTS ANALYSIS .....</b>	<b>48</b>
5.3.1 Soils .....	48
5.3.2 Water Resources and Wetlands .....	49
5.3.3 Biological Resources .....	49
5.3.4 Cultural Resources.....	50
5.3.5 Hazardous and Toxic Materials and Wastes.....	51
<b>5.4 CONCLUSION .....</b>	<b>51</b>
<b>6.0 REFERENCES.....</b>	<b>53</b>
<b>7.0 ACRONYMS AND ABBREVIATIONS.....</b>	<b>57</b>
<b>8.0 DISTRIBUTION LIST.....</b>	<b>59</b>

**TABLE OF CONTENTS (continued)**

Page No.

**LIST OF TABLES**

Table 1: Comparison of the Potential Effects on the Evaluated Alternatives.....	18
Table 2: Soils Descriptions .....	27

**LIST OF FIGURES**

Figure 1: Fort Benning.....	2
Figure 2: Location of the Kelley Hill Cantonment Area. ....	4
Figure 3: Locations of Proposed HBCT Action Alternatives and the Kelley Hill Tank Trail.....	9
Figure 4: Location of the Ochillee Tank Trail .....	10
Figure 5: Identified RCW Clusters and Foraging Habitat Partitions Along the Ochillee Tank Trail .....	36

**LIST OF APPENDICES**

Appendix A – Notice of Availability
Appendix B – Public Comments
Appendix C – Building Demolition List

## 1.0 PURPOSE AND NEED

### 1.1 INTRODUCTION

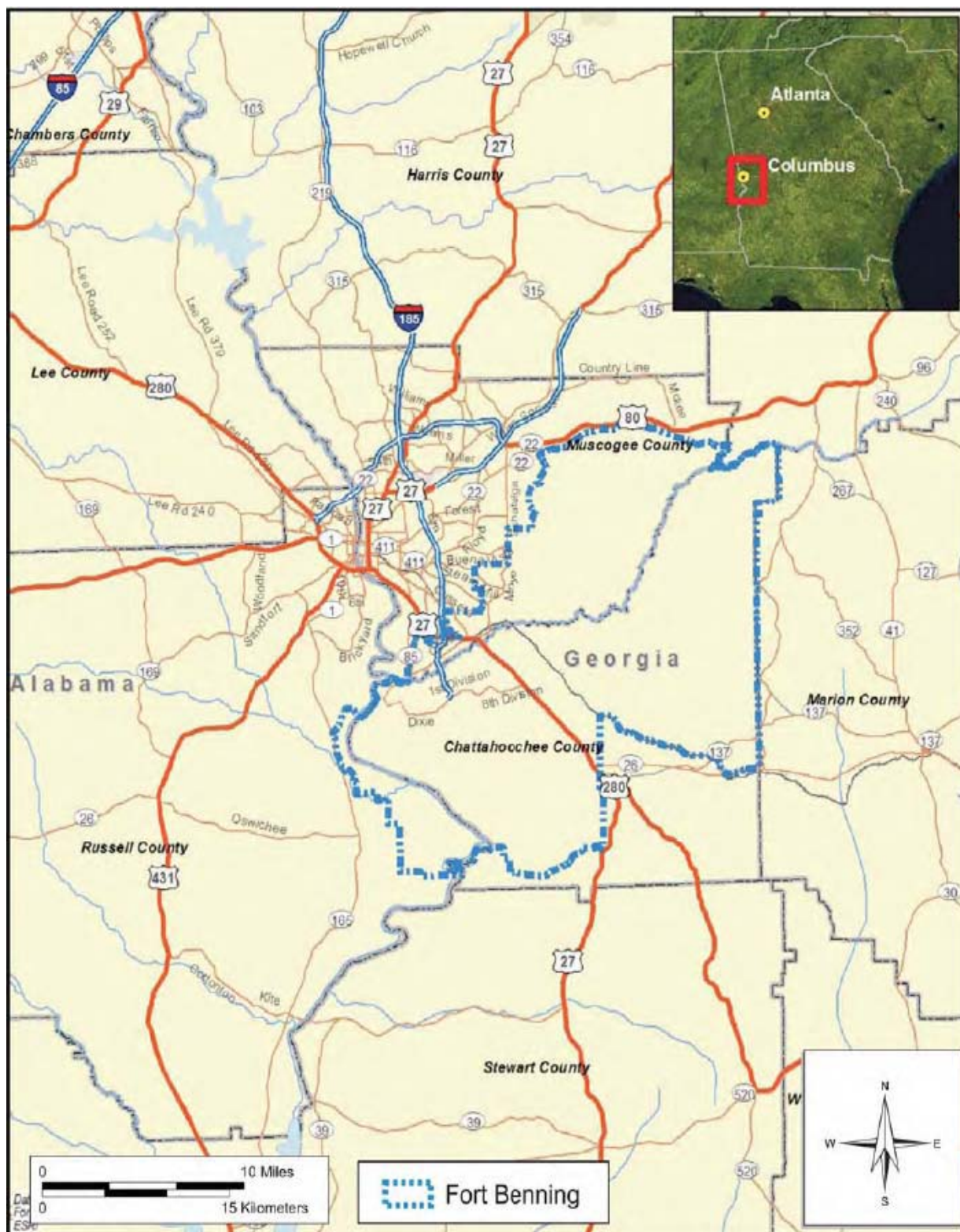
This Environmental Assessment (EA) evaluates the proposal of the Department of the Army (DA) to implement the Proposed Heavy Brigade Combat Team (HBCT) Complex at Fort Benning, Georgia. This Proposed HBCT Action involves the construction, operation, and maintenance of Army standard design maintenance complex including a Tactical Equipment Maintenance Facility (TEMF); arms room; organizational storage buildings; access roads; hazardous waste storage; oil storage; shop aprons; organizational vehicle parking; UAV maintenance hangar; and upgrade of the Kelley Hill and Ochillee tank trails. This Proposed Action would improve training and military operations of the HBCT, notably in concert with the establishment of the Maneuver Center of Excellence (MCoE).

As required by the National Environmental Policy Act of 1969 (NEPA; 42 US Code [USC] 4321 *et seq.*), the Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Part 1500-1508), and the Army NEPA Regulation (*Environmental Analysis of Army Actions*, Final Rule; 32 CFR Part 651, 1 January 2007), the potential environmental and socioeconomic effects of this Proposed HBCT Action are analyzed in this EA.

The Army NEPA Regulations collectively establishes a process by which Fort Benning considers the potential environmental impacts of its proposed actions and invites the involvement of regulators and interested members of the public prior to deciding on a final course of action. As such, this EA will facilitate the decision-making process regarding the Proposed HBCT Action and its considered alternatives. This EA will also provide the basis for determining if a Finding of No Significant Impact (FNSI) with some mitigation is appropriate, or if an Environmental Impact Statement (EIS) is required in accordance with the above regulations.

Fort Benning consists of approximately 182,000 acres of federally owned land south and east of Columbus, Georgia, and south of Phenix City, Alabama; the Chattahoochee River traverses the southwest portion of the Installation (**Figure 1**). There are four cantonment areas on Fort Benning: Main Post, Kelley Hill, Sand Hill, and Harmony Church. Within these cantonment areas, Fort Benning has its own offices, training classroom, schools, shopping malls, medical facilities, housing, and churches. Fort Benning also has multiple training areas outside of the cantonment areas, including facilities and ranges located in the southern, eastern, and northern portions of the Installation.

Currently, Fort Benning is gaining units, including the Armor School from Fort Knox, under the 2005 Base Realignment and Closure (BRAC). This includes both an increase in population and facilities, as well as associated effects in the surrounding area. This increase in personnel and facilities is due to multiple, Army-required initiatives including, but not limited to, BRAC 2005, Army Modular Force (i.e., Transformation), Grow the Army, and the associated MCoE.



### Figure 1: Fort Benning

The Army has shared its associated proposed increased training plans and facility development plans at Fort Benning with the public, and has assessed the environmental effects of these proposals and alternatives within two prior NEPA documents, resulting in the following decisions:

1. Final EIS and Record of Decision (ROD) for the BRAC 2005 and Transformation Actions at Fort Benning, Georgia (October 2007).
2. Final EIS and ROD for the MCoE at Fort Benning, Georgia (June 2009).

Overall, the largest influx of personnel is led by the 2005 BRAC Commission decisions to relocate the Armor Center and School from Fort Knox, Kentucky, to Fort Benning. This consolidates the Armor and Infantry Centers and Schools at Fort Benning and creates the MCoE for ground forces training. The BRAC realignments are increasing the Post population by more than 16,500 persons within the next few years. This brings the total population of Soldiers, students, trainees, family members, and civilian employees at Fort Benning to more than 50,000.

As analyzed in the two EISs, multiple training and support projects are now being constructed at Fort Benning. One such project originally identified in the BRAC and MCoE EISs mentioned above, was the 3<sup>rd</sup> ID HBCT Complex which was initially to be located in the Harmony Church Cantonment Area in conjunction with support facilities for the relocation of the Armor School. However, this original siting was not centrally located to support the main functions and operations of the 3<sup>rd</sup> ID HBCT. As the Kelley Hill Cantonment Area acts as the “Command and Control” center for the 3<sup>rd</sup> Brigade, centrally locating the HBCT Complex to the operations and training centers for the 3<sup>rd</sup> ID would reduce the expense of having to move military equipment and Soldiers for maintenance and training operations.

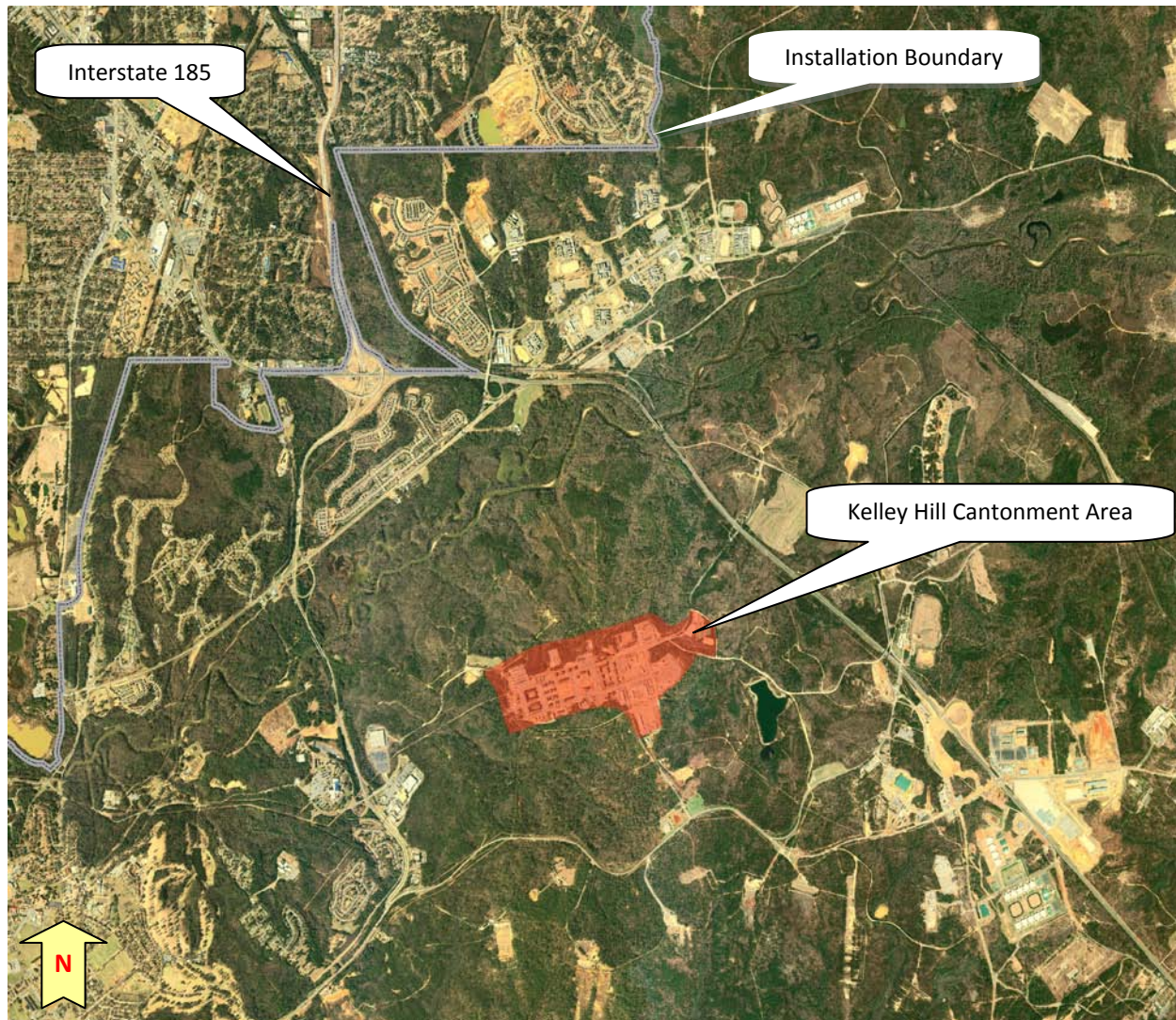
For the purposes of this EA, the BRAC/Transformation and MCoE projects are presumed to be complete.

## **1.2 PURPOSE AND NEED**

The Proposed HBCT Action is needed to provide adequate unit maintenance facilities to support the reorganization and stationing of a Heavy Brigade Combat Team at Kelley Hill. Per the Department of Army Modularity Order, the 3<sup>rd</sup> Infantry Division (Mechanized) is being reorganized as part of the Army’s Transformation. The 3<sup>rd</sup> Heavy Brigade Combat Team (HBCT) 3<sup>rd</sup> Infantry Division (3<sup>rd</sup> ID) currently occupies maintenance and operations facilities in the Kelley Hill Cantonment Area on Fort Benning (see **Figure 2**). The brigade is transforming from three battalions into six battalions, and is being fully populated with current personnel and newly trained Soldiers. The current tactical equipment maintenance structures are not capable of supporting military vehicles currently in use, nor the growth of the 3<sup>rd</sup> ID that will result in more personnel and military vehicles.



Currently, there are two company-sized motorpools with vehicle maintenance facilities that were constructed in the 1950's. These existing facilities have become inadequate for maintenance operations due to outdated design features. The roll-up doors are too narrow with insufficient overhead clearance to accommodate the size of current standard military vehicles. Consequently, a greater portion of the necessary maintenance operations are performed outdoors. The facilities also lack adequate heavy lift capabilities, do not provide a sufficient number of maintenance bays to accommodate the mission, and do not meet current electrical and mechanical codes.



**Figure 2: Location of the Kelley Hill Cantonment Area**

This Proposed HBCT Action would provide a tactical equipment maintenance complex to support the unit operations, as the existing facilities are not able to support the current and proposed Modularity Stationing Actions. The Proposed HBCT Action is needed to allow new

and existing training and support facilities to operate at their full capability, in a coordinated and controlled fashion.

The specific purpose of the Proposed HBCT Action is two-fold:

1. **Maintenance Complex:** Construct, operate, and maintain an Army standard design maintenance complex which will include a TEMF; arms room; organizational storage buildings; access roads; hazardous waste storage; oil storage; shop aprons; upgrade of tank trail; organizational vehicle parking and UAV maintenance hangar.
2. **Upgrade of tank trails:** This Proposed HBCT Action includes the upgrade of existing tank trail infrastructure that starts in the Kelley Hill Cantonment Area and runs eastward towards the Ochillee Railhead Loading Facility in the Harmony Church area.

The Proposed HBCT Action is needed to allow new and existing training and support facilities to operate at their full capability, in a coordinated and controlled fashion.

Under current conditions, if this proposed project were not implemented, the 3<sup>rd</sup> ID would continue to use the out-dated, substandard facilities for maintenance and training operations. Presently, there are not enough vehicle maintenance facilities to accommodate the proposed HBCT expansion. Also under current conditions, the existing tank trails are not structurally sufficient to maintain current or anticipated increases in operational tempo, and could possible hinder training operations if not repaired.

Fort Benning is preparing this EA to identify, evaluate, and compare the potential environmental effects of implementing the Proposed HBCT Action. This EA is prepared in accordance with NEPA (40 CFR 1500-1508); the CEQ regulations that implement NEPA; and Army NEPA Regulations at 32 CFR Part 651 (Army Regulation 200-1, *Environmental Effects of Army Actions*). In general, the CEQ regulations require that prior to implementing any major action, the Federal agency must evaluate the proposal's potential environmental effect as well as notify and involve the public in the agency's decision-making process.

This EA identifies the potential environmental effects of the Alternatives, and contains discussions of any mitigation and permit requirements, findings, and conclusions in accordance with NEPA. Such information provides the basis for Fort Benning to determine which alternative to select and/or whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FNSI).

## **2.0 DESCRIPTION OF THE PROPOSED ACTION**

### **2.1 INTRODUCTION**

The 3<sup>rd</sup> HBCT, 3<sup>rd</sup> ID currently occupies existing maintenance and operations facilities in the Kelley Hill Cantonment Area on Fort Benning. The 3<sup>rd</sup> ID is being reorganized as part of the Army's Transformation. The existing Brigade is transforming from three battalions into six battalions, and will require adequate unit maintenance facilities to accommodate current and projected increases in support operations. The currently existing facilities have become inadequate for maintenance operations due to outdated design features. Consequently, a greater portion of the necessary maintenance operations are performed outdoors. The existing facilities also lack adequate heavy lift capabilities, do not provide a sufficient number of maintenance bays to accommodate the mission, and do not meet current electrical and mechanical codes.

### **2.2 PROPOSED ACTION**

Under the Proposed HBCT Action, Fort Benning would construct, operate and maintain an Army standard design TEMF and Heavy Brigade Combat Team Complex in support of the purpose and need described in Section 1.2. The Kelley Hill and Ochillee tank trails would also be upgraded in this Proposed HBCT Action. Construction of the TEMF and HBCT complex would occur within the boundaries of Fort Benning in the Kelley Hill Cantonment Area (**Figure 3**). The construction and upgrades proposed for the Ochillee tank trail would occur within the existing tank trail footprint and run eastward from the Kelley Hill central wash facility to the Ochillee Rail Loading Facility in the Harmony Church area.

Additional elements needed to support the Proposed HBCT Action would include electrical, water, sewer and natural gas services; security lighting; exterior communications; fire protection; storm sewer system and detention structure; curb, gutter and sidewalks, site preparation; erosion control measures; landscaping, fencing and signage. Air conditioning would be provided in the administrative areas and mechanical ventilation in the repair bays.

Anti-terrorism/force protection (AT/FP) measures would be included to provide necessary set backs from adjacent roads and personally owned vehicle (POV) parking. Access for individuals with disabilities would be provided in the public areas. Intrusion detection systems (IDS) and energy monitoring control systems (EMCS) would be installed. Sustainable Design and Development (SDD) and the Energy Policy Act of 2005 (EPAct05) features would be included.

In addition, demolition of 29 buildings and structures totaling approximately 61,300 square feet will also occur as part of the Proposed HBCT Action. The current facilities and structures, (e.g. grease racks, oils storage buildings, maintenance shops, etc.), proposed for demolition will no longer be needed as they will be replaced with the newer and updated facilities for the operation of the Proposed HBCT Complex. As the majority of these facilities were constructed in the 1950's, it is assumed that lead-based paint (LBP) and asbestos containing materials (ACM) are

present. All buildings and structures will be required to be inspected and abated for LBP and ACM lead-based paint and asbestos containing materials prior to any demolition activities. All building materials and wastes generated prior to and during demolition would be disposed of in accordance with all applicable Federal, State and Army regulations.

The proposed Kelley Hill and Ochillee tank trails upgrade and repair would occur in the previously established tank trail footprint and consists of approximately 58 acres. As defined in the Military Construction Project Data Sheet (DD Form 1391), the proposed upgrade to the tank trail has been divided in two parts. Part 1 of the tank trail upgrade would be directly associated with the TEMF and HBCT complex in the Kelley Hill Cantonment Area to provide tanks, (and other military vehicles), access to the central wash facility located in the eastern part of the Kelley Hill Cantonment Area.

Part one of the Kelley Hill tank trail upgrade is approximately 11,000 feet in length. The existing tank trail was originally constructed in 1988 with an experimental concrete pavement. The pavement has since failed and is projected to be replaced with conventional concrete pavement. The upgrade to the existing tank trail would follow the established footprint, except for a minor shift to accommodate the realignment of the Marne Road and Watkins Avenue intersection within the Kelley Hill Cantonment Area.

Part two of the proposed tank trail repair and upgrade would be approximately 18,500 feet in length, starting at the central wash facility in Kelley Hill and run eastward to Wood Road near the Ochillee Rail Loading Facility in the Harmony Church area. The existing Ochillee tank trail was constructed in 1995 primarily consisting of gravel. All improvements to this portion of the tank trail would follow the existing tank trail footprint. Minor construction activities would occur outside of the existing tank trail gravel limits to include the construction of riprap ditches, and the placement of temporary erosion control measures. Paving the existing tank trail could increase storm water drainage runoff which would require work to stabilize the existing road-side ditches. Nevertheless, the limits of disturbance for this part of the tank trail upgrade would still be confined to the far edges of the old ditch lines that were constructed in 1995.

### **2.2.1 Mitigation Measures**

As part of this Proposed HBCT Action, the Army would implement mitigation measures to reduce potential adverse effects, and ensure that none of the Proposed HBCT Action components would result in significant adverse effects to environmental resources. These mitigation measures would include the following overarching requirements, which will be incorporated into the Proposed HBCT Action for all of the Action Alternatives. These measures include:

- Locate all proposed construction and tank trail upgrades within existing, previously disturbed areas and footprints.
- Minimize impacts to existing and designated Red-cockaded Woodpecker (RCW, a federally listed endangered species) habitat, and all pine trees measuring equal to or greater than 10 inches diameter breast height (dbh). This measure also includes limiting

construction activities within 200 feet of all RCW cavity trees during the 1 April through 31 July breeding season.

- Upgrades and repairs to the Ochiltee tank trail would be limited to the trail's existing footprint. No pine trees larger than 6 inches in dbh will be removed for this project component. Only scrub and brush overgrowth from lack of tank trail maintenance is to be removed.
- Minimize adverse impacts to all National Register of Historic Places (NRHP) eligible cultural resources sites. However, if avoidance cannot be done through design, then excavation and data recovery for the site(s) will be done (Hamilton 2011).
- Minimize impacts to wetlands, stream buffers, and other regulated surface water features. This would include a minimum 25-foot exclusionary setback, in accordance with Georgia stream buffer requirements, from the edge of wretched vegetation to either side of the streams.
- Compliance with the requirements of the NPDES general permit program. The permit process would include submission of a Notice of Intent (NOI) and Erosion Sedimentation Pollution Control Plan (ESPCP) to the Georgia Department of Natural Resources, Environmental Protection Division.
- Minimize impacts to migratory birds protected under the MBTA and to comply with the USFWS's guidance concerning migratory birds (USFWS, 7 January 2009).

During proposed construction activities, traffic would be managed through the use of temporary signals, signage, and other routine traffic control measures typical of utility construction to ensure that project components do not inhibit traffic flow during construction activities.

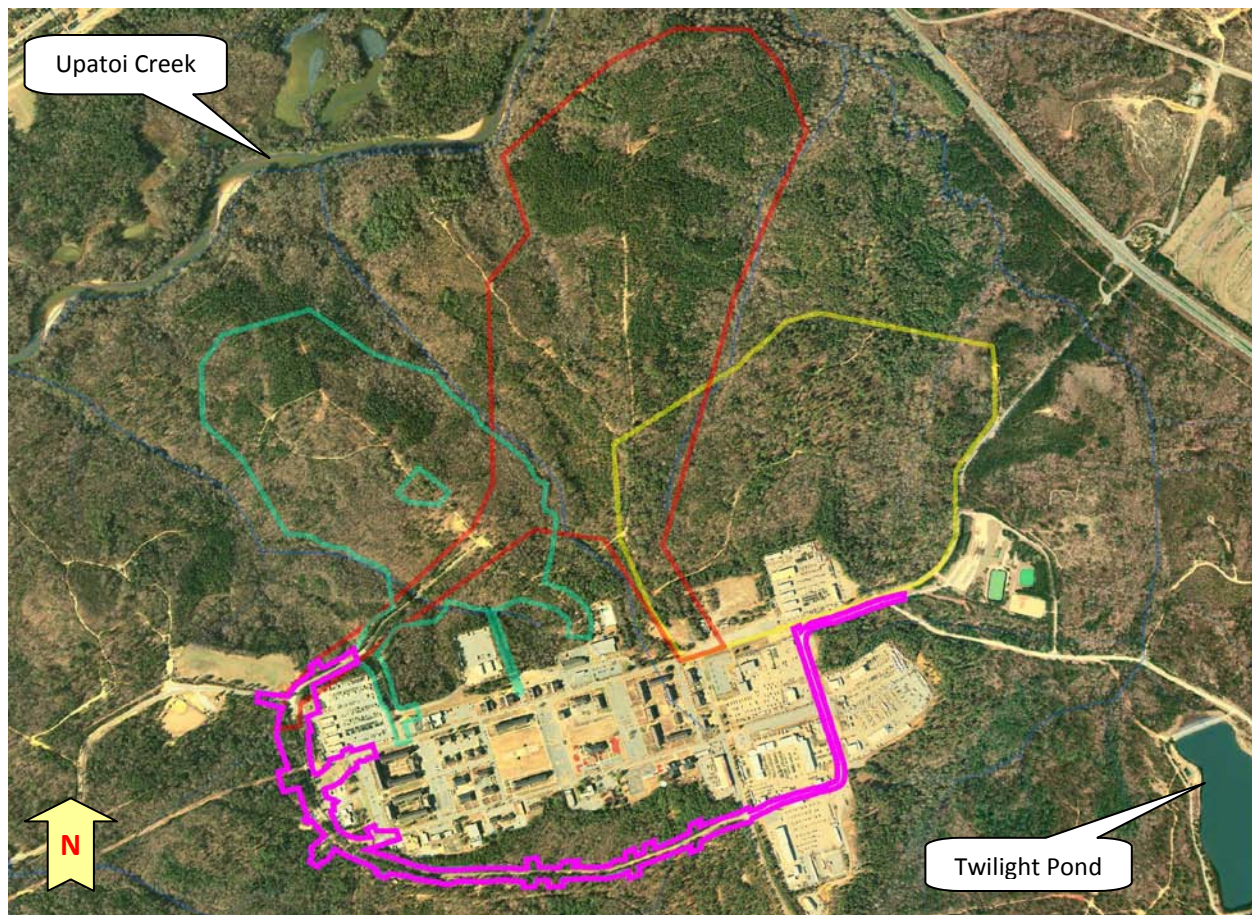
Each component and segment of the Proposed HBCT Action would be submitted to the EMD using the Fort Benning environmental review process prior to the time it is proposed for implementation. This process would help ensure that any future changes in the locations of environmental resources (e.g., such as changes in the locations of the RCW clusters and/or cavity trees), utilities, or other elements are addressed with the most current information available. The Fort Benning environmental review process also provides the proponent guidance in adhering to all Federal and State laws and regulations, as well as Army requirements. This would equally ensure that significant adverse impacts are avoided and/or mitigation measures are implemented to protect environmental resources.

## **2.3 SCOPE OF THE ENVIRONMENTAL ASSESSMENT**

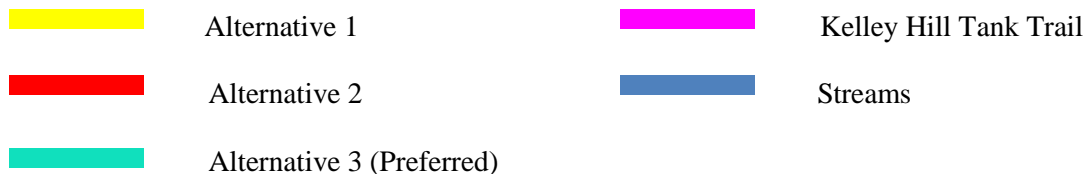
This EA has been developed in accordance with the NEPA and the CEQ's and Army's NEPA implementing regulations. This EA evaluates the potential direct, indirect, and cumulative environmental and socioeconomic effects of three alternatives for the Proposed HBCT Action, as



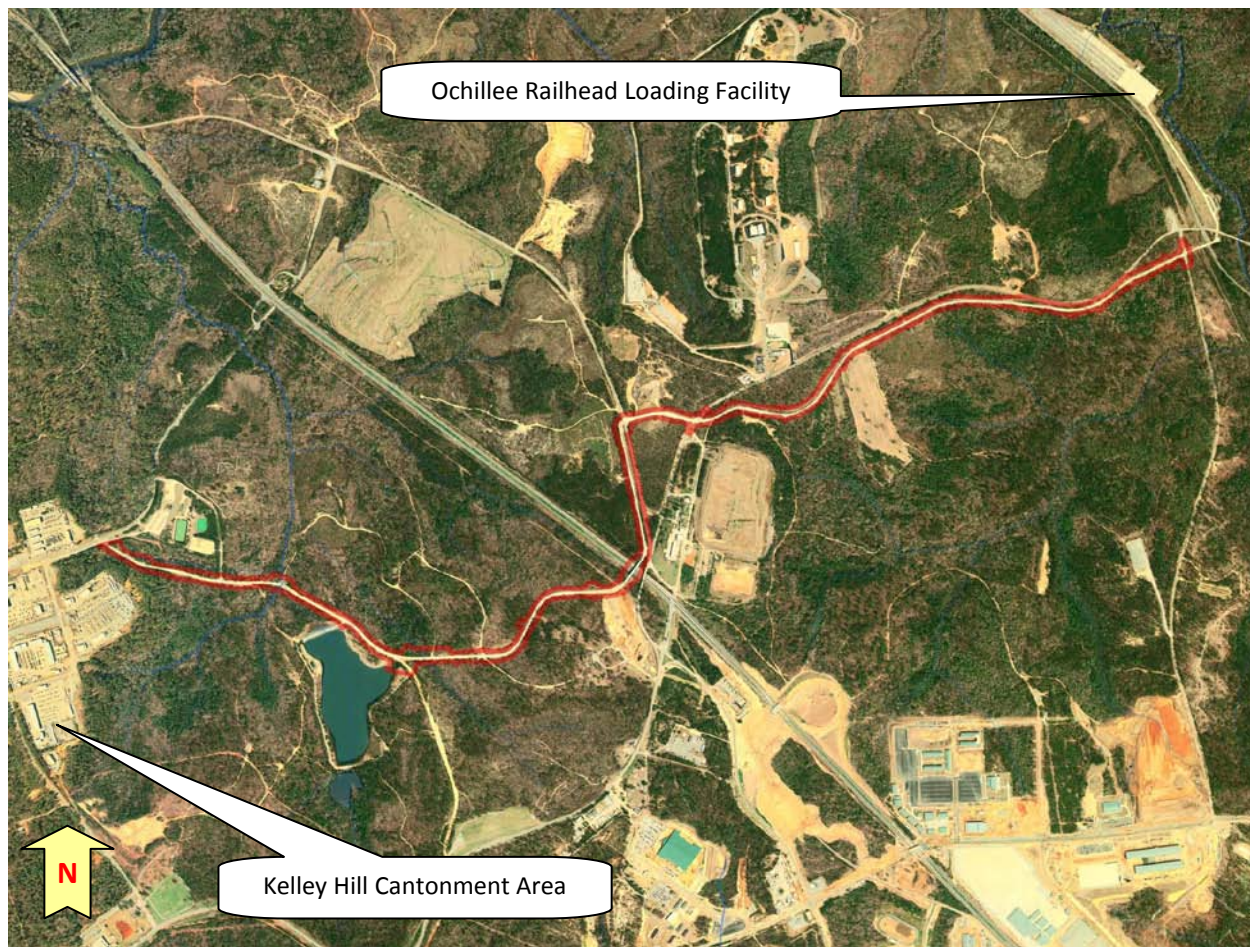
well as the No Action Alternative. All of the Action Alternatives presented in this EA consist of the construction of an Army standard design maintenance complex including a TEMF; arms room; organizational storage buildings; access roads and upgrade of the Kelley Hill tank trail; hazardous waste storage; oil storage; shop aprons; organizational vehicle parking and UAV maintenance hangar. The locations for the three Proposed HBCT Action Alternatives are illustrated in **Figure 3**. Each Alternative also includes the upgrade and repair of the existing Ochillee tank trail that starts in the Kelley Hill Cantonment Area and runs eastward towards the Ochillee Railhead Loading Facility in the Harmony Church area (see **Figure 4**).



**Figure 3. Locations of Proposed HBCT Action Alternatives and the Kelley Hill Tank Trail.**







**Figure 4. Location of the Ochillee Tank Trail.**

 Proposed Limits of Disturbance for the Ochillee Tank Trail Upgrade and Repair.

The primary dissimilarities between the Proposed HBCT Action Alternatives are the site locations and amount of disturbed acres of land for each Alternative. A more detailed description and discussion of the Alternatives is presented in **Section 3.0.**, as well as descriptions of the Alternatives eliminated from detailed study.

The proponent is in the process of preparing a detailed engineering design of the proposed TEMF and all associated facilities to support and operate an Army standard maintenance shop. If an Action Alternative is selected for implementation, engineering designs will clearly show the specific proposed location and limits of disturbance for the new HBCT complex, as well as the Kelley Hill and Ochillee Tank Trail upgrades. This design will be prepared in conjunction with Fort Benning's current and extensive Geographic Information System (GIS)-based data identifying the locations of environmental resources (see **Section 4.0**). The final design will be reviewed by Fort Benning during an environmental review process for concurrence.

Resource categories analyzed in this EA include: land use; air quality; noise; geology and topography; soils; ground and surface water resources, including wetlands; biological resources, including vegetation, wildlife, wildlife habitat, plant communities, and protected species; cultural resources; socioeconomics; human health and safety, including children's health and safety risks; environmental justice; infrastructure; transportation; and Hazardous and Toxic Materials and Wastes (HTMW). This EA also considers the cumulative effects of this proposed action when considering other past, present, and reasonably foreseeable actions within the region influenced by the Alternatives.

## **2.4 DECISION MAKING**

The Garrison Commander of Fort Benning is the Federal decision-maker concerning this proposal. The purpose of this EA is to inform the Federal decision-maker and the public of the potential environmental consequences of the Proposed HBCT Action and Alternatives.

The decision to be made is whether, having taken potential environmental and socioeconomic effects into account, Fort Benning should implement the Proposed HBCT Action, under what Alternative, and what mitigation measures will be implemented to reduce adverse effects on resources.

## **2.5 PUBLIC AND AGENCY INVOLVEMENT**

Fort Benning invites public participation in their Federal decision-making through the NEPA process. Consideration of the views and information of all interested persons promotes open communication and enables better decision-making. Agencies, federally recognized Native American Tribes, organizations, and members of the public having a potential interest in the Proposed Action are urged to participate in the Federal decision-making process.

### **2.5.1 Public Review of the Final EA and Draft FNSI**

This EA and a Draft Finding of No Significant Impact (FNSI) will be available to the public for a 30-day public comment period. The Notice of Availability (NOA) for the Final EA and Draft FNSI will be published in *The Columbus Ledger-Enquirer* and Fort Benning's *The Bayonet* in accordance with the Army NEPA Regulation (32 CFR Part 651.36). The Final EA and Draft FNSI will also be available at the following local libraries (see **Appendix A**):

1. Columbus Public Library
2. South Columbus Branch Library
3. Fort Benning Main Post Library

In addition, the documents will be posted on the Fort Benning website at <https://www.benning.army.mil/garrison/DPW/EMD/legal.htm>. The NOA also have been mailed



to all agencies/individuals/organizations on the Fort Benning NEPA distribution (mailing) list for the Proposed Action (see **Section 8.0**).

At the end of this 30-day public comment period, any substantive comments submitted will be considered in the Garrison Commander's decision making. As appropriate, the Garrison Commander may then execute the FNSI and proceed with implementation of the selected Alternative. If it is determined that implementation of the selected Alternative would result in significant impacts that cannot be mitigated to less-than-significant levels, a Notice of Intent (NOI) to prepare an EIS will be published in the *Federal Register*, or the Proposed HBCT Action will not be implemented.

### **2.5.2 Native American Consultation/Coordination**

For proposed Army actions, consultation with federally recognized Native American Tribes is required under Department of Defense Instruction (DoDI) 4710.02 (*Interactions with Federally Recognized Tribes*), which implements the Annotated DoD American Indian and Alaska Native Policy (dated 27 October 1999); Army Regulation (AR) 200-1; the NEPA; the National Historic Preservation Act (NHPA); and the Native American Graves and Protection and Repatriation Act (NAGPRA).

Fort Benning consults with Federally recognized Native American Tribes affiliated with the Fort Benning area by following the Army Alternate Procedures (AAP) for compliance with Section 106 of the NHPA, and the consultation procedures prescribed within the Historic Properties Component (HPC) of the Integrated Cultural Resources Management Plan (ICRMP) for Fort Benning (DA 2006; ICRMP 2008). Under these procedures, Fort Benning provides the Tribes with copies of relevant documentation with existing and proposed actions (e.g. this EA), and solicits Tribal input. Fort Benning also holds consultation meetings the Tribes biannually.

As part of this on-going process and dialogue, Fort Benning requests consultation with these Tribes as Sovereign Nations per Executive Order (EO) 13175, *Consultation and Coordination with Indian Tribal Governments*, 6 November 2000. Any concerns expressed by the Tribes will be incorporated into the Federal decision-making process regarding this Proposed HBCT Action.

## **2.6 REGULATORY FRAMEWORK**

This EA has been developed in accordance with the NEPA, CEQ's NEPA implementing regulations, and the Army's NEPA Regulation. Federal, State, and local laws and regulations specifically applicable to this Proposed Action are identified, where appropriate, within this EA, and include, but are not limited to:

- Federal Endangered Species Act (ESA) of 1973, as amended (Public Law 93-205, 87 Stat. 884, 16 USC 1531 - 1534).

- Federal Water Pollution Control Act, or Federal Clean Water Act (CWA), of 1972, as amended; Sections 401 and 404.
- Migratory Bird Treaty Act (MBTA; 16 USC 703-712, 3 July 1918; as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986, and 1989).
- Federal Clean Air Act of 1990 (42 USC 7401 *et seq.*, as amended).
- Resource Conservation and Recovery Act (RCRA) (42 U.S.C. § 6901 *et seq.*, October 21, 1976; as amended December 31, 2002).
- Georgia Department of Natural Resources - Water Quality Control Act and the implementing regulations pertaining to the National Pollutant Discharge Elimination System (NPDES).
- The Georgia Erosion and Sedimentation Control Act of 1975 (as amended; *GESA*).

---

## 3.0 ALTERNATIVES CONSIDERED

### 3.1 INTRODUCTION

The Army NEPA Regulation requires reasonable Alternatives to be evaluated. Alternatives that are eliminated from detailed analysis must be identified along with a brief discussion of the reasons for eliminating them. For purposes of analysis, an Alternative was considered “reasonable” only if it would meet the purpose and need for the Proposed HBCT Action as described in **Section 1.2**. “Unreasonable” alternatives would not enable Fort Benning to meet the purpose and need for the Proposed Action and therefore not fully analyzed.

### 3.2 ALTERNATIVES DEVELOPMENT

#### 3.2.1 Screening Criteria

The Army used screening criteria to determine which Alternatives are reasonable. Satisfaction of these screening criteria would provide a location suited to meet the purpose of and need for the Proposed HBCT Action, while potentially minimizing adverse environmental and operational effects.

#### Screening Criteria

**Use of Previously Disturbed Areas:** Proposed HBCT Action should be located within existing disturbed or previously "approved" construction areas. This includes, but is not limited to: previously disturbed areas, roadways, trails, and areas already approved for construction. Fort Benning identified that within the Kelley Hill Cantonment Area there were previously disturbed areas north of the current 3<sup>rd</sup> ID maintenance facilities where the three Proposed Action Alternatives have been located.

**RCW (Federal-listed species) Impact Minimization:** Proposed HBCT Action should minimize impacts to RCWs and their habitat. This criteria includes minimizing impacts and removal of pine trees measuring equal to or greater than 10 inch dbh, and also includes limiting construction activities within 200 feet of all RCW cavity trees during the 1 April through 31 July breeding season.

**Environmentally Sensitive Area Impact Minimization:** Proposed Action components should be sited to minimize impacts to NRHP-eligible cultural resources sites, wetlands, streams, floodplains, and other identified environmentally sensitive areas on the Installation.

**Training Compatibility:** Proposed HBCT Action should be located in areas that do not conflict with or limit training, both during construction and operation. The requirement must be met for the user and other units within the Kelley Hill Cantonment Area. This includes avoiding impacts

to training ranges, areas potentially containing unexploded ordinance (also due to worker safety), and Surface Danger Zones (SDZs).

**Location and Proximity:** The Proposed HBCT Action should be centrally located to the “Command and Control” operations and training for the 3<sup>rd</sup> ID and mission needs of the 3<sup>rd</sup> ID HBCT. Centrally locating the HBCT Complex to the operations and training centers for the 3<sup>rd</sup> ID would reduce the expense of having to move military equipment and Soldiers for maintenance and training operations.

### 3.2.2 Application of Screening Criteria

The Army reviewed the proposed 3<sup>rd</sup> ID HBCT Complex required components, (e.g. maintenance shops, oil storage facilities, administrative buildings, tank trail upgrades, etc.), and made adjustments to meet the above criteria as much as possible. This included realigning sections of the proposed tank trail upgrades to avoid environmental resources. For example, for the proposed upgrade and repair to the Ochiltee Tank Trail, the construction activities would be limited to the original ditch lines and not expand beyond previously disturbed areas. This component of the Proposed HBCT Action was even further limited to allow only the removal of scrub-brush overgrowth and pine trees of 6 inch dbh or less to avoid impacts to RCW habitat.

Fort Benning considered possible alternatives to achieve the purpose and need for the Proposed HBCT Action. These included:

- 3<sup>rd</sup> ID HBCT Complex Design Layout Alternative 3 in Kelley Hill (upgrade to tank trails included)
- 3<sup>rd</sup> ID HBCT Complex Design Layout Alternative 2 in Kelley Hill (upgrade to tank trails included)
- 3<sup>rd</sup> ID HBCT Complex Design Layout Alternative 1 in Kelley Hill (upgrade to tank trails included)
- Original 3<sup>rd</sup> ID HBCT Complex Design Layout Alternative in Harmony Church Cantonment Area (no upgrade to tank trails)

Each of these Alternatives was compared to the screening criteria. **Section 3.3** provides additional detail as to the decision to consider Alternatives as reasonable or unreasonable. Through this analysis, only three Action Alternatives, the *Alternative 3 (Preferred Alternative)*, *Alternative 2* and *Alternative 1*, met all of the required screening criteria.

## 3.3 EVALUATED ALTERNATIVES

All of the Proposed HBCT Action Alternative locations are illustrated in **Figure 2**. Project components for all of the Alternatives would include construction of a TEMF complex for the

HBCT and upgrades and repairs to the Kelley Hill and Ochillee Tank Trails. The Kelley Hill Tank Trail runs along the southern boundary of the Kelley Hill Cantonment Area to the wash facility to the east. The Ochillee Tank Trail runs eastward from the Kelley Hill Cantonment Area to the Ochillee Railhead Loading Facility in the Harmony Church area (see **Figure 3**).

### **3.3.1 Alternative 3 (Preferred Alternative)**

The proposed location for Alternative 3 is directly northwest of the Kelley Hill Cantonment Area. Compared to Alternatives 1 and 2, this site requires a further distance to travel to the central wash facility; however, it would be closer to the existing dining facilities. The total proposed acreage impacted by this Alternative projection is 236 acres. It is further projected that construction of the HBCT complex could affect approximately 71 acres of pine plantation that is approximately 5-years in age, and is not designated as current or future potential habitat for RCWs.

One NHRP-eligible site (9CE198 – consisting of Prehistoric Indian Lithic Scatter) occurs within the proposed construction footprint of Alternative 3. If this Alternative is chosen for implementation, and the site cannot be avoided through project design, it will be mitigated through excavation and data recovery.

### **3.3.2 Alternative 2**

The proposed location for Alternative 2 is directly north of the Kelley Hill Cantonment Area. The total proposed acreage impacted by this alternative projection is 319 acres. It is further projected that construction of the HBCT complex could affect approximately 147 acres of pine plantation that is roughly 22-years in age, and is designated as future potential habitat for RCWs.

Two NRHP-eligible sites occur within this proposed action area (i.e., 9CE691 and 9CE693, both consisting of Prehistoric Indian Artifact or Shell Scatter). If this Alternative is chosen for implementation, and the sites cannot be avoided through project design, it will be mitigated through excavation and data recovery.

### **3.3.3 Alternative 1**

The proposed location Alternative 1 is directly northeast of the Kelley Hill Cantonment Area. The total proposed acreage impacted by this alternative projection is 245 acres. It is further projected that construction of the HBCT complex could affect approximately 62 acres of mature pine plantation that is approximately 60 to 90-years in age, and is designated as future habitat for RCWs.

One NRHP-eligible site occurs within this proposed action area (i.e., 9CE691 – consisting of Prehistoric Indian Artifact or Shell Scatter). If this Alternative is chosen for implementation, and

the sites cannot be avoided through project design, it will be mitigated through excavation and data recovery.

### **3.3.4 No Action Alternative**

Under this Alternative, the Proposed HBCT Action would not be implemented. Current training and maintenance activities would continue to be performed in out-dated, inadequate facilities that are currently used to equipment maintenance and training. The existing Kelley Hill and Ochillee Tank Trails would not be repaired or upgraded, and could potentially decrease the operational efficiency of the 3<sup>rd</sup> ID.

## **3.4 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION**

Fort Benning eliminated the Harmony Church Cantonment Area Alternative, as this Alternative is unreasonable since the main functions and home for the 3<sup>rd</sup> ID HBCT is in the Kelley Hill Cantonment Area. This made the Harmony Church Cantonment Area not centrally located to the “Command and Control” or training and operational mission needs of the 3<sup>rd</sup> ID HBCT. While the Kelley Hill proposed locations are in direct proximity to the current 3<sup>rd</sup> ID facilities, the Proposed Harmony church location would be approximately 5 miles from the “Command and Control” center in Kelley Hill. This would increase the expense of having to move military equipment and Soldiers for training and maintenance operations. Therefore, this Alternative was considered unreasonable, and not carried further for analysis.

## **3.5 COMPARISON OF THE POTENTIAL EFFECTS OF THE EVALUATED ALTERNATIVES**

The existing condition of the environmental resources at Fort Benning potentially affected by each of the three considered Alternatives is presented in **Section 4**. **Section 5** presents an analysis of each Alternative's potential cumulative environmental effects to each environmental resource area, or Valued Environmental Component (VEC). The reader is referred to those Sections for additional information.

The results of that analysis are summarized briefly in **Table 1** in accordance with CEQ Regulations and directives. By including these data here, the reader is provided with a rapid, upfront summary of the potential environmental effects of each Alternative.

**Table1: Comparison of the Potential Effects on the Evaluated Alternatives**

VEC	NO ACTION ALTERNATIVE	(PREFERRED) ALTERNATIVE 3	ALTERNATIVE 2	ALTERNATIVE 1
<b>Land Use</b>	No effects.	No effects.	No effects.	No effects.
<b>Air Quality</b>	No effects.	Short-term, localized, <i>de minimis</i> effect during construction. No long-term air quality effects.	Short-term, localized, <i>de minimis</i> effect during construction. No long-term air quality effects.	Short-term, localized, <i>de minimis</i> effect during construction. No long-term air quality effects.
<b>Noise</b>	No effects.	Short-term, localized, <i>de minimis</i> effect during construction. No long-term noise effects.	Short-term, localized, <i>de minimis</i> effect during construction. No long-term noise effects.	Short-term, localized, <i>de minimis</i> effect during construction. No long-term noise effects.
<b>Soils</b>	No effects.	Short-term, minor adverse soils effects due to potential erosion during construction. Effects would be reduced through compliance with NPDES requirements.	Short-term, minor adverse soils effects due to potential erosion during construction. Effects would be reduced through compliance with NPDES requirements	Short-term, minor adverse soils effects due to potential erosion during construction. Effects would be reduced through compliance with NPDES requirements
<b>Water Resources and Wetlands</b>	No effects.	Short-term, minor adverse effects during construction. Effects would be reduced through compliance with NPDES and Section 404 requirements.	Short-term, minor adverse effects during construction. Effects would be reduced through compliance with NPDES and Section 404 requirements.	Short-term, minor adverse effects during construction. Effects would be reduced through compliance with NPDES and Section 404 requirements. .
<b>Biological Resources</b>	No effects	Minor adverse effects. Potential removal of 71 acres of pine plantation that is approximately 5-years in age. Not designated as current or future potential RCW habitat. Mitigation measures proposed to further minimize impacts from the Ochillee tank trail construction.	Moderate adverse effect. Potential removal of 147 acres of pine plantation that is approximately 22-years in age. Currently designated as future potential habitat for RCWs. Mitigation measures proposed to further minimize impacts from the Ochillee tank trail construction.	Moderate adverse effect. Potential removal of 62 acres of pine plantation that is approximately 60 to 90-years in age. Currently designated as future potential habitat for RCWs. Mitigation measures proposed to further minimize impacts from the Ochillee tank trail construction.
<b>Cultural Resources</b>	No effects.	No adverse effects during construction with mitigation. Mitigation measures proposed: excavation and data recovery for site 9CE198.	No adverse effects during construction with mitigation. Mitigation measures proposed: excavation and data recovery for sites 9CE691 and 9CE693.	No adverse effects during construction with mitigation. Mitigation measures proposed: excavation and data recovery for site 9CE691.

<b>Socioeconomics (including Environmental Justice and Protection of Children)</b>	No effects.	Short-term positive impact for dollars being spent within the community. No effects to health and safety of children.	Short-term positive impact for dollars being spent within the community. No effects to health and safety of children.	Short-term positive impact for dollars being spent within the community. No effects to health and safety of children.
<b>Utilities</b>	No effects.	No effects.	No effects.	No effects.
<b>Transportation and Traffic</b>	No effects.	Short-term, localized, <i>de minimis</i> effect during construction. No long-term effects.	Short-term, localized, <i>de minimis</i> effect during construction. No long-term effects.	Short-term, localized, <i>de minimis</i> effect during construction. No long-term effects.
<b>Airspace</b>	No effects.	No effects.	No effects.	No effects.
<b>HTMW</b>	No effects.	Short- and long-term <i>minor</i> effects during demolition, construction, and maintenance operations. Facilities would be able to meet storage, use, and handling requirements.	Short- and long-term <i>minor</i> effects during demolition, construction, and maintenance operations. Facilities would be able to meet storage, use, and handling requirements.	Short- and long-term <i>minor</i> effects during demolition, construction, and maintenance operations. Facilities would be able to meet storage, use, and handling requirements.
<b>Cumulative Effects</b>	No effects.	No significant adverse cumulative effects.	No significant adverse cumulative effects.	No significant adverse cumulative effects.



## **4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

### **4.1 INTRODUCTION**

This Section provides a description of the existing environmental and socioeconomic conditions at and surrounding the Alternatives being considered. As described in **Section 3.0**, these Alternatives include the No Action Alternative; Alternative One (sited directly northeast of Kelley Hill Cantonment Area); Alternative Two (sited directly north of Kelley Hill Cantonment Area); and Alternative Three – the Preferred Alternative (sited directly northwest of Kelley Hill Cantonment Area). All of the Alternative presented in this EA include the repair and upgrade of the Kelley Hill Tanks Trail that traverses the western and southern boundary of the Kelley Hill Cantonment Area, and the Ochiltee Tank Trail which traverses from the eastern boundary of the Kelly Hill Cantonment Area and

This Section provides information that serves as a baseline from which to identify and evaluate any individual or cumulative environmental and socioeconomic changes likely to result from the implementation of the Action Alternatives. The Region of Influence (ROI) of these Action Alternatives, and therefore of this EA, is relatively small and is primarily contained within the Kelley Hill Cantonment Area, the Ochiltee Tank Trail, and the surrounding, immediately adjacent lands.

In compliance with the NEPA, CEQ Regulation, and Army NEPA Regulation, the description of the affected environment focuses on those resources and conditions potentially subject to the effects of the proposed action. This is in accordance with CEQ Regulations at 40 CFR Part 1500.1(b) and 1500.4(b): "...NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail....prepare analytic rather than encyclopedic analyses."

### **4.2 RESOURCES ANALYZED**

The following subsections discuss those VECs that have been dismissed from further analysis in this EA and those that are fully analyzed. The rationale for dismissing certain VECs because the potential for impacts has been considered to be negligible or non-existent and are fully described in **Section 4.3**. Resources that have been considered to present a potential impact to resources are fully analyzed in **Section 4.4**.

### **4.3 RESOURCES ELIMIANATED FROM FURTEHR ANALYSIS**

#### **4.3.1 Land Use**

Fort Benning encompasses approximately 182,000 acres in portions of Muscogee and Chattahoochee Counties in Georgia, and Russell County in Alabama. No lands within the

Alabama portion of Fort Benning would be affected by the Proposed HBCT Action. Land use within the boundary of Fort Benning consists of operational training areas, open space, and four cantonment areas: Main Post, Sand Hill, Kelley Hill, and Harmony Church.

Land use within the approximately 400-acre Kelley Hill Cantonment Area includes unaccompanied personnel housing, Soldier community facilities, and operational maintenance facilities. The Proposed HBCT Action, under any of the Action Alternatives, would be compatible and consistent in land use with the Kelley Hill Cantonment Area and the immediately adjacent land areas, and would not result in a substantial change in land use from existing conditions. Training land would be converted over to buildings and grounds for operational and training usage which is consistent with the current functions of the Kelley Hill Cantonment Area. As such, utilization of the land areas adjacent to the Kelley Hill Cantonment Area for the Proposed HBCT Complex would result in no effects as these areas will be utilized for mission essential training and operations.

Under the No Action Alternative, current land use in the Kelley Hill Cantonment Area would not change and cause no impact. As none of the Action Alternatives would cause an adverse effect to land use, further evaluation of this VEC is not warranted in this EA.

#### 4.3.2 Air Quality

According to the GaDNR, Chattahoochee and Russell Counties are currently in attainment for all National Ambient Air Quality Standards (NAAQS) criteria pollutants. In 2009, the GaDNR recommended to the US Environmental Protection Agency (USEPA) that Muscogee County, Georgia be classified as being in non-attainment for the 8-hour ozone standard (<http://www.georgiaair.org/airpermit/html/planningsupport/naa.htm>). Based on currently available data, however, this recommendation has not yet been accepted by the USEPA, and the area is considered to be in full attainment of the NAAQS.

The Proposed HBCT Action would result in a *de minimis*, localized, short-term increase in air emissions during construction. This would result from construction vehicles onsite and the short-term generation of fugitive dust due to minor earth disturbance. Any increases during construction would be short-term, minor, and localized, and therefore would not result in an increase of criteria pollutants at Fort Benning or its surrounding area during construction activities.

Once the HBCT Complex has been constructed and is operational, Fort Benning would be required to include the estimated annual emissions from all stationary sources, (e.g. boilers, generators, solvent baths/degreasers, fuel storage tanks, etc.), in the Installation's Title V permit. No long-term air quality effects are anticipated based upon the Title V permitting requirements for Fort Benning. In addition to Title V permitting, all applicable Federal and State air quality protection requirements will be implemented. Because the activities associated with the Proposed HBCT complex and tanks trail upgrade would constitute only minor changes to existing emissions levels and local and regional air quality would not be degraded.

On February 18, 2010, the CEQ issued draft guidance on incorporating greenhouse gas (GHG) considerations into NEPA review of federal actions. This guidance is intended to establish protocols for the analysis of the direct and indirect effects of GHG and the potential effects of climate change on the environment that may result from proposed Federal actions. The current CEQ proposal identifies annual emissions of more than 25,000 metric tons of carbon dioxide-equivalent, (which includes carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride), as the minimum level in assessing impacts on the environment and public health and safety, and for reporting emissions under the Clean Air Act (CEQ 2010).

Examples of proposals for Federal agency action that may warrant a detailed analysis and discussion of the GHG impacts of various alternatives, as well as possible measures to mitigate climate change impacts, include: 1) approval of a large solid waste landfill; 2) approval of energy facilities such as a coal-fired power plant; or 3) authorization of a methane venting coal mine (CEQ 2010). In reference to the Proposed HBCT Action, the GHG emissions resulting from construction and operations of the HBCT Complex would be *de minimis* based on the current CEQ guidance concerning GHGs.

Under the No Action Alternative, no effects to air quality would be anticipated. Therefore, air quality is not further evaluated in this EA.

#### 4.3.3 Noise

Several noise-producing activities currently take place within the Kelley Hill Cantonment Area, including military equipment maintenance activities, operation of personal and military vehicles, construction projects, and various types of operational military training. Noise resulting from the use of equipment for the construction of facilities under all of the Proposed Action Alternatives would be short-term and localized resulting in *de minimis* noise effects. Construction would occur in each specific area over a short period, and would occur during normal business (i.e., daylight) hours. No long-term noise effects would occur from construction activities.

Temporary increased levels of noise would terminate upon completion of construction, and the noise environment would return to pre-construction conditions. Operationally, training would continue in the similar manner as is found under existing conditions and will be accounted for in the Installation's Operational Noise Management Plan. As Kelley Hill serves as the home of the 3<sup>rd</sup> Brigade of the 3<sup>rd</sup> ID, the cantonment area primarily functions as a military training and operations center in support of the 3<sup>rd</sup> ID mission and training. As such, there are no sensitive noise receptors within the Kelley Hill Cantonment Area, (e.g. hospitals, schools, churches, etc.), that would be adversely affected due to construction activities and/or operations of the Proposed HBC Complex.

Under the No Action Alternative, no changes in the noise environment would occur within the Kelley Hill Cantonment Area. Therefore, noise is not further evaluated in this EA.

#### 4.3.4 Socioeconomics

For the purposes of this EA's analysis, socioeconomics includes population, housing, economy, employment, Protection of Children, Environmental Justice, and community facilities and services, including emergency services, of and at Fort Benning and its immediate vicinity.

The proposed 3<sup>rd</sup> ID HBCT Complex at Kelley Hill would have a short-term, positive effect on the local economy during construction. This includes the potential for additional jobs during construction, thus increased local spending by the workforce. None of the Action Alternatives would induce long-term population growth within the Installation or the surrounding communities, nor have an adverse effect on housing. The socioeconomic effects from this proposed action would be negligible, and are consistent with those effects presented in the MCoE Final EIS. Therefore, socioeconomics have been eliminated from further discussion in this EA.

In 1994, President Clinton signed EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*. This EO requires Federal agencies to identify any disproportionately high and adverse human health or environmental effects on low-income and/or minority communities. As the Proposed HBCT Action is limited to the Kelley Hill Cantonment Area, there would be no effects to minority or low-income populations. Therefore, there are no effects to Environmental Justice issues and are not further discussed in this EA.

Because children may suffer disproportionately (i.e., more so than adults, due to physiological and behavioral differences) from environmental health risks and safety risks, EO 13045, *Protection of Children From Environmental Health Risks and Safety Risks*, was signed by President Clinton in 1997. The intent of EO 13045 was to prioritize the identification and assessment of environmental health and safety risks that may affect children, and to ensure that Federal agencies' policies, programs, activities, and standards address these environmental and safety risks to children. As the Kelley Hill Cantonment Area primarily functions as a military training and operations center in support of the 3<sup>rd</sup> ID mission and training, there are no schools or large populations of children in the vicinity of Kelley Hill. As such, the potential to cause environmental and safety risks to children are negligible. In addition, the Proposed HBCT Action construction area(s) would be carefully monitored and controlled for only authorized access, (e.g. construction workers, project managers, mitigation monitors, etc.), therefore, no effects to children would occur.

Under the No Action Alternative, there would be no change in socioeconomics or environmental justice in the Kelley Hill Cantonment Area. As none of the Action Alternatives would cause an adverse effect to these VECs, further evaluation of this VEC is not warranted in this EA.

#### 4.3.5 Utilities

Columbus Water Works, ATMOS Gas, and Flint Energies own and manage the water and sewer, gas, and electric utilities, respectively, on Fort Benning. The sanitary sewage collection system

consists of approximately 126 miles of clay, cast iron, and concrete lines, as well as the Columbus Water Works treatment plant (DA 2009). Flint Energies supplies electricity to Fort Benning through overhead and/or buried transmission lines, and ATMOS Gas provides gas through underground pipelines.

Under the proposed action, utility systems (power, electric, sewer, and potable/waste water) would need to be connected to new HBCT Complex facilities from these existing systems. Detailed electrical engineering designs have not been performed, nor have specific demands been determined; however, the increases in building footprints would increase the demand for additional electricity, gas, and water and sewer services. Nevertheless, this increase in demand would not alter the findings of the utility impact analysis presented in the MCoE Final EIS.

The facilities proposed for HBCT Complex would be required to adhere to the Army mandate to follow the guidelines for energy efficiency per the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED). This increased demand is not expected to overload the current utility infrastructure within the Kelley Hill Cantonment Area, or the Installation as a whole. Therefore, all of the Proposed Action Alternatives would result in no impacts to utilities in the short-term (during construction activities), or in the long-term (during operations).

Under the No Action Alternative, no effects to utilities would occur. Therefore, no further discussion of utilities is warranted within this EA.

#### **4.3.6 Transportation and Traffic**

Marne Road and Ivy Road are the two major roadways that provide access to the Kelley Hill Cantonment Area from within the Installation. East-west traffic is served by Marne Road and Watkins Street, and north-south by Ivy Road and Bell Richards Street. The tank trails from Kelley Hill provide limited tracked vehicle access to Harmony Church (to the southwest), and the Malone and Kilo training ranges (to the northwest). There are no heavy equipment transport rail loading facilities within Kelley Hill, or tank trails to provide tracked vehicles access to Lawson Army Airfield, or the Sand Hill Cantonment Area.

Marne Road is a two lane, two-way roadway that links Victory Drive (U.S. Highway 27/280) to the Lindsay Creek Bypass (hospital and mall area) and Main Post through Kelley Hill. Traffic volumes in Kelley Hill are approaching 4,700 vehicles per day (Fort Benning, 2009). Ivy Road is a two lane, two-way road that links Kelley Hill to Main Post, Harmony Church, and the Malone and Kilo training ranges through First Division and Marne Roads.

Construction of the Proposed HBCT for all of the Action Alternatives, could cause a short-term, localized, *de minimis* effect to transportation and traffic flow within the Kelley Hill Cantonment Area and the Ochillee Tank Trail. This would be due to an increase in vehicular traffic, (e.g. heavy equipment, dump trucks, etc.), during construction activities of the HBCT Complex and the associated tank trails. These construction activities may also result in temporary delays and create alternate traffic patterns along Marne Road and Watkins Avenue due to proposed road realignment to accommodate the Kelley Hill Tank Trail upgrade.

Once the new HBCT Complex and upgrade to the Kelly Hill and Ochiltee Tank Trails has been completed, transportation and traffic flow could experience long-term, beneficial impacts as military vehicles would be able to better utilize the tank trail infrastructure for training and operations.

Under the No Action Alternative, there would be no effects on transportation or traffic because no new construction or upgrades to roads and/or tank trails would occur. Due to the short-term, localized, *de minimis* effects to transportation in the Kelley Hill Cantonment Area, this resource is not carried forward in the EA.

#### **4.3.7 Airspace**

The Proposed HBCT Action, under any of the Action Alternatives, would include the construction of a UAV hanger. However, all flights and associated activities, other than storage and maintenance, would occur on other parts of the Installation. Any changes in use of airspace resulting from the operations and training exercises utilizing UAVs, would require additional NEPA analysis and is beyond the scope of this Proposed Action.

Under the No Action Alternative, no effects to airspace would occur. Therefore, no further discussion of airspace is warranted in this EA.

### **4.4 RESOURCES FULLY ANALYZED**

The following subsections describe the existing conditions of those VECs found within Fort Benning and the Kelley Hill Cantonment Area retained for further analysis. Each of these VECs has the potential to be affected by the Proposed Action Alternatives.

#### **4.4.1 Soils**

Two basic soil provinces make up Fort Benning: the Georgia Sand Hills and the Southern Coastal Plains. The Georgia Sand Hills are a narrow belt of deep sandy soils with rolling to hilly topography. These soils are primarily derived from marine sand, loams, and clays that were deposited over acid crystalline and metamorphic rocks. South of the Sand Hills are the Southern Coastal Plains soils, which are divided into nearly level to rolling valleys and gently sloping steep uplands. These soils contain a loamy or sandy surface layer and loamy or clayey soils (DA 2004).

Based on the US Department of Agriculture, Natural Resource Conservation Service's (USDA NRCS) soil survey "K factor," most of the soils found at Fort Benning, with the exception of southern portions of the Installation, are identified as low to moderately erodible when undisturbed. The degree of erodibility is determined by physical factors such as drainage, permeability, texture, structure, and percent slope. The rate of erodibility is based on the amount of vegetative cover, climate, precipitation, proximity to water bodies, and land use. Disruptive

activities accelerate the natural erosion process by exposing the erodible soils to precipitation and surface runoff (DA 2009).

Prime farmland soils, protected under the Farmland Protection Policy Act (7 USC 4201; FPPA of 1981, as amended) are not discussed in this EA, as the Proposed HBCT Action would not permanently alter soils or substantially preclude their future use for other purposes, and no lands within Fort Benning have been classified as prime farmland. Therefore, there is no further discussion of prime farmland in this EA.

#### **4.4.1.1 Affected Environment**

The Region of Influence (ROI) for soils analysis includes the Kelley Hill Cantonment Area and the immediately surrounding adjacent lands and lands adjacent to the Ochillee Tank Trail corridor that could be directly and/or indirectly impacted by soil erosion and sedimentation from the Proposed HBCT Action.

The common soil types found within the Kelley Hill Cantonment Area consist of the Nankin, Troup, Bibb, Lucy, Fuquay, and the Cowarts-Ailey. Most of the soils found at Fort Benning, with the exception of the southern portions of the Installation, are identified as having a low to moderate erosion hazard when left undisturbed; however, historic and ongoing ground-disturbing activities at Fort Benning have accelerated the natural erosion process, and rendered on-Post soils more highly erodible. Soils within Fort Benning generally are prone to erosion when disturbed (e.g., such as through construction). **Table 2** provides a brief description of soils within the ROI.

Impacts to soils are considered significant if ground disturbance or other activities violate applicable Federal or State laws and regulations, and the potential for Notices of Violation (NOV) being issued for the failure to receive applicable state permits (e.g., NPDES construction permit) prior to initiating the Proposed Action. Potential adverse effects to soils could result from ground disturbance leading to soil erosion, fugitive dust propagation, sedimentation, and pollutants such as hazardous materials and/or waste.

Under all of the Proposed HBCT Action Alternatives, tributary stream areas and wetlands will be avoided during any land disturbing activities; however, if disturbance to these areas is deemed unavoidable the appropriate consultation and permits (e.g., stream buffer variance) will be obtained. Soil erosion and sedimentation controls will be put in place, per the Clean Water Act, the Georgia Erosion and Sedimentation Control Act, and NPDES permits will be obtained in prior to any construction activities.

**Table 2: Soils Descriptions**

Soil Series	Description
<b>Ailey</b>	Ailey soils consist of deep or very deep to a dense layer. The series contains well-drained, slowly permeable soils formed in sandy and loamy marine sediment on uplands mostly in the upper coastal plain. Slopes are 20-25 percent. K factor* is 0.15.
<b>Bibb</b>	Bibb soils consist of very deep, poorly drained, moderately permeable soils that formed in stratified loamy and sandy alluvium. These soils are on flood plains of streams in the Coastal Plain. They are commonly flooded and water runs off the surface very slowly. Slopes range from 0 to 2 percent. K factor is 0.20.
<b>Cowarts</b>	Cowarts soils consist of very deep, well-drained and moderately well-drained soils on ridge tops and side slopes on uplands of the Coastal Plain. They formed in loamy marine sediments. Slopes range from 1 to 60 percent. K factor is 0.15.
<b>Esto</b>	Esto soils consist of deep, well-drained, slowly permeable soils that formed in clayey marine sediments of the Coastal Plain. Slopes range from 2 to 25 percent. K factor is 0.28.
<b>Fuquay</b>	Fuquay soils consist of very deep, well-drained soils with deep or very deep, common internal free water occurrence. The soils formed sandy over loamy marine deposits or fluvio-marine deposits on marine terraces, uplands, and flats. Slopes range from 0 to 10 percent. K factor is 0.10.
<b>Lucy</b>	Lucy soils consist of very deep, well-drained, moderately permeable soils on uplands. They formed in sandy and loamy marine and fluvial sediments of the Southern Coastal Plain. Slopes range from 0 to 45 percent. K factor is 0.10.
<b>Nankin</b>	Nankin soils consist of deep, well-drained, moderately slowly permeable soils on uplands of the Coastal plain. The series is formed in stratified loamy and clayey marine sediments. Slopes range from 0 to 60 percent. K factor is 0.32.
<b>Troup</b>	Troup soils consist of deep, somewhat excessively drained, moderately permeable soils with thick sandy surface and subsurface layers and loamy sub-soils. They formed in unconsolidated sandy and loamy marine sediments on Coastal Plain uplands. Slopes range from 0 to 40 percent. K factor is 0.10.

Source: USDA NRCS. *Official Soil Series Descriptions* [Online WWW]. Available URL: <http://soils.usda.gov/technical/classification/osd/index.html>

\*The higher the value, the more susceptible the soil is to sheet and rill erosion by water (USDA NRCS 2006).

#### 4.4.1.2 Effects of Alternative 3 (Preferred Alternative)

The total proposed area of ground disturbance for this Alternative, (including the HBCT Complex and Ochillee Tank Trails), would be approximately 236 acres. The total amount of earth disturbance area will be determined through the final GIS-based design of the Proposed HBCT Action. Under the Preferred Alternative, *short-term, minor adverse effects* to soils within the ROI would occur.

No long-term effects to soils would be anticipated, as the proposed HBCT Complex construction site would be re-vegetated and stabilized following construction activities. The proposed access



roads and tank trail upgrades would be maintained as improved roadways with appropriate permanent runoff control measures in place (i.e., ditch lines, storm water management devices, etc.). Specific mitigation measures are presented in **Section 4.4.1.6**.

#### **4.4.1.3 Effects of Alternative 2**

The total proposed area of ground disturbance for this Alternative, (including the HBCT Complex and tank trails), would be approximately 319 acres. The total amount of earth disturbance will be determined through the final GIS-based design of the Proposed HBCT Action. Under this Alternative, *short-term, minor adverse effects* to soils within the ROI would occur. No long-term effects to soils would be anticipated, similar to Alternative 3, as the site would be re-vegetated and stabilized, and the tank trail upgrades would include permanent runoff control measures.

#### **4.4.1.4 Effects of Alternative 1**

The total proposed area of ground disturbance for this Alternative, (including the HBCT Complex and tank trails), would be approximately 245 acres. The total amount of earth disturbance will be determined through the final GIS-based design of the Proposed HBCT Action. Under this Alternative, *short-term, minor adverse effects* to soils within the ROI would occur. No long-term effects to soils would be anticipated, similar to Alternative 3, as the site would be re-vegetated and stabilized, and the tank trail upgrades would include permanent runoff control measures.

#### **4.4.1.5 Effects of the No Action Alternative**

Under the No Action Alternative, *no effects* to the soils within the ROI would occur as the Proposed HBCT Action would not be implemented.

#### **4.4.1.6 Mitigation Measures**

For all of the Proposed HBCT Action Alternatives, construction of the HBCT complex and tank trail repairs and upgrades, mitigation measures would be implemented to minimize the effects to soil resources. Application of Federal and State erosion control measures and NPDES permitting requirements to include preparation of an ESPCP detailing erosion and sedimentation control BMPs, and a minimum 25-foot surface water setback to minimize soil impacts during construction would be required prior to any construction activities. Additionally, adherence to Federal and State laws and regulations, as well as Installation management plans, would minimize impacts due to training, operations, and maintenance activities in the long-term. Therefore, no additional mitigation measures are warranted.

### **4.4.2 Water Resources and Wetlands**

This subsection provides a description of the water resources and wetlands within the limits of the Proposed HBCT Action. Water resources include both surface water and groundwater. For the purposes of this EA, no surface waters or wetlands were delineated in the field specifically for any of the Action Alternatives. All information was obtained through Fort Benning DPW-EMD/CMB/LMB environmental documentation and Installation GIS data. Water resources discussed in this EA include Watersheds, Groundwater, Floodplains, and Wetlands which could potentially be affected by demolition, construction or operational activities associated with the Proposed HBCT Action.

**Watersheds.** Fort Benning is predominantly located within the Chattahoochee River Watershed. This 8,770 square mile watershed contains part of the Blue Ridge, Piedmont, and Coastal Plain Physiographic Provinces and spans portions of Georgia, Alabama, and Florida. Fort Benning contains many tributaries and streams that flow into the Chattahoochee River through Upatoi Creek on the Georgia side of the Installation and the Uchee Creek on the Alabama side. Within the southernmost portion of the Installation, streams and tributaries flow directly into the Chattahoochee River, while the northwest portion of the Installation drains into Bull Creek. A small portion of the southeastern corner of the Installation drains into the Flint River Basin to the east. As the Chattahoochee and Flint Rivers traverse southward from the Installation, ultimately adjoin and flow into the Gulf of Mexico (DA 2004).

Fort Benning's watershed management practices include the development and implementation of a soil conservation program at the watershed level. Watershed Management Units (WMUs) were identified at Fort Benning as part of a watershed inventory in 1998. These WMUs are used as a framework for monitoring water quality and erosion, conducting watershed restoration projects, and conducting other management activities. Based on data from the 1998 inventory, Fort Benning contains 29 WMUs, of which 15 occur entirely within the Installation (DA 2009).

Section 305(b) of the CWA requires States to assess and describe the quality of its waters every two years in a report called the 305(b) report. Section 303(d) of the CWA requires States to submit to the USEPA a list of all of the waters that are not meeting their designated uses and that need to have a Total Maximum Daily Load (TMDL) established for the water body.

**Groundwater.** Fort Benning is located within the Coastal Plain Hydrogeologic province. The principal groundwater source for Fort Benning is the Cretaceous aquifer system. The regional direction of groundwater flow in the Coastal Plain is from the north to the west. Aquifers in the Coastal Plain consist of porous sands and carbonates, and include alternating units of sand, clay, sandstone, dolomite, and limestone (DA 2009). Groundwater depths at the Installation are variable and range from two feet near Upatoi Creek to more than 100 feet in surrounding elevations. On average, depths in the main cantonment areas vary from 20 to 40 feet.

**Floodplains.** EO 11988, *Floodplain Management*, requires Federal agencies to determine whether a proposed action would occur in a floodplain and instructs Federal agencies to consider the risk, danger, and potential impacts of locating projects within floodplains. If the agency proposes an action in a floodplain, the agency must consider alternatives to avoid adverse effects

and incompatible development in the floodplain. Floodplains are associated with many on-Post streams and tributaries and are present throughout the Installation.

**Wetlands.** Wetlands are defined by the CWA as areas “inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, the prevalence of vegetation typically adapted for life in saturated soil conditions” (USDI, 1992). Wetlands are protected under Sections 401 and 404 of the CWA and other regulations. Disturbances to wetlands that cannot be avoided need to comply with the permitting requirements of Section 404 of the CWA. Wetland information presented in this EA is based on available GIS data as a result of previous Installation wetland delineations, and National Wetlands Inventory mapping. No onsite wetland delineations were conducted specifically in support of this EA.

#### **4.4.2.1 Affected Environment**

The ROI for water resources and wetlands analysis includes the Kelley Hill Cantonment Area and the immediately surrounding adjacent lands, and lands adjacent to the Ochillee Tank Trail corridor that could be directly and/or indirectly impacted by soil erosion and sedimentation from the Proposed HBCT Action.

The whole of the Kelly Hill Cantonment Area and the Ochillee Tank Trail occurs within WMU 5, which drains via tributaries to Upatoi Creek to the north. Larger streams within the Proposed Alternative Action areas include: Castin Creek, Daugherty Creek, Wortley Creek, and a number of unnamed tributaries to Heriot Creek, Upatoi Creek, and Hamlet Creek. Additionally, under any of the Proposed Action Alternatives, no construction activities would cross or be located within 100 feet of any Georgia EPD 303(d) identified reaches of impaired stream segments. The nearest impaired stream is Tiger Creek, located approximately 1 mile north of the Proposed Action Alternatives in the Sand Hill Cantonment Area.

Storm water controls would be implemented in conjunction with the tank trail upgrades to avoid major maintenance costs due to potential erosion in the future. The proposed storm water control measures include bio-swales, a detention pond, diversion of existing drainage to more stable outlets, and numerous temporary and permanent erosion control measures. The bio-swales will recharge ground water and reduce the storm water drainage runoff. The detention pond will reduce the runoff from an existing outlet that has caused erosion in the past. The increase in storm water in the development of Kelley Hill Cantonment Area over time has caused some of the existing drainage outfalls to be unstable. Three existing drainage pipes crossing under the roads and tank trail leading to unstable outlets would be diverted to a more stable outlet.

Under any of the Proposed Action Alternatives, there are no anticipated effects to groundwater resources, nor any identified 100-year floodplains within the any of the Proposed Action Alternatives, including the Ochillee Tank Trail corridor. Approximately 4 acres of wetlands have been identified within the Kelley Hill Cantonment Area, and potential impacts are discussed further in the Alternatives analysis in the following subsections.

The threshold level of significance for water quality is the violation of applicable Federal or State laws and regulations, such as the CWA and NPDES permitting, and if the Proposed Action would result in long-term chemical, physical, or biological effects that would adversely alter the historical baseline or violate standard water quality conditions or criteria. Adverse effects to water resources (including water quality) could result from erosion, runoff, and surface contamination from pollutants such as hazardous materials and/or waste. Effects to water are most likely to occur during rain events on construction activities.

The threshold for streambanks and wetlands is failure to obtain the necessary permits or the violation of applicable Federal and State laws and regulations. An action also would have a significant effect on water resources if it would increase flooding or cause substantial sedimentation that would result in adverse upstream or downstream effects to people or property.

#### **4.4.2.2 Effects of Alternative 3 (Preferred Alternative)**

Under the Preferred Alternative, *short-term, minor adverse effects* to water resources and wetlands within the ROI could occur during construction. The potential impacts to Wortley Creek, Daugherty Creek and an unnamed tributary to Upatoi Creek (approximately 2,144 linear feet of streams) would be minimized by measures taken to match the pre- and post-hydrologic conditions in the construction area (bio-swales, infiltration basins, etc.). Current GIS data projects that Alternative 3 could potentially affect up to approximately four acres of wetlands based on the proposed construction footprint.

All of the Preferred Alternative components, (HBCT Complex and Ochiltee Tank Trail upgrade), and associated construction would be located at a minimum distance of 25 feet from the edge of wrested vegetation to either side of streams. In addition, such a 25-foot setback would be observed adjacent to all surface water features, including wetlands. No construction equipment or construction would occur within this buffer, in accordance with the Georgia Erosion Sedimentation Act (GESA), with the exception of perpendicular utility crossings and repair of existing facilities (i.e., Ochiltee Tank Trail crossing points).

No long-term effects to water resources or wetlands would be anticipated, as the proposed HBCT Complex construction site would be re-vegetated and stabilized following construction activities. The proposed access roads and tank trail upgrades would be maintained as improved roadways with appropriate permanent runoff control measures in place (i.e., ditch lines, storm water management devices, etc.). Specific mitigation measures are presented in **Section 4.4.2.6**.

#### **4.4.2.3 Effects of Alternative 2**

Under this Alternative, *short-term, minor adverse effects* to water resources and wetlands within the ROI could occur during construction. The potential impacts to Castin Creek, Daugherty Creek and an unnamed tributary to Upatoi Creek (approximately 4,859 linear feet of streams) would be minimized by measures taken to match the pre- and post-hydrologic conditions in the construction area (bio-swales, infiltration basins, etc.). Current GIS data projects that Alternative

2 could potentially affect up to approximately one acre of wetlands based on the proposed construction footprint.

The Proposed HBCT Complex and Ochillee Tank Trail upgrade would adhere to the same provisions of GESA as described in Alternative 3. No long-term effects to water resources or wetlands would be anticipated, as the proposed HBCT Complex construction site would be re-vegetated and stabilized following construction activities. The proposed access roads and tank trail upgrades would be maintained as improved roadways with appropriate permanent runoff control measures in place (i.e., ditch lines, storm water management devices, etc.).

#### **4.4.2.4 Effects of Alternative 1**

Under this Alternative, *short-term, minor adverse effects* to water resources and wetlands within the ROI could occur during construction. The potential impacts to Castin Creek and an unnamed tributary to Heriot Creek (approximately 3,390 linear feet of streams) would be minimized by measures taken to match the pre- and post-hydrologic conditions in the construction area (bio-swales, infiltration basins, etc.). Current GIS data projects that Alternative 1 does not contain any delineated wetlands within the proposed construction footprint.

The Proposed HBCT Complex and Ochillee Tank Trail upgrade would adhere to the same provisions of GESA as described in Alternative 3. No long-term effects to water resources or wetlands would be anticipated, as the proposed HBCT Complex construction site would be re-vegetated and stabilized following construction activities. The proposed access roads and tank trail upgrades would be maintained as improved roadways with appropriate permanent runoff control measures in place (i.e., ditch lines, storm water management devices, etc.).

#### **4.4.2.5 Effects of the No Action Alternative**

Under the No Action Alternative, *no effects* to the water resources and wetlands within the ROI would occur as the Proposed HBCT Action would not be implemented.

#### **4.4.2.6 Mitigation Measures**

For all of the Proposed HBCT Action Alternatives, construction of the HBCT complex and tank trail repairs and upgrades, mitigation measures would be implemented to minimize the effects to water resources. Application of Federal and State erosion control measures and NPDES permitting requirements to include preparation of an ESPCP detailing erosion and sedimentation control BMPs, and a minimum 25-foot surface water setback to minimize soil impacts during construction would be required prior to any construction activities. Additionally, adherence to Federal and State laws and regulations, as well as Installation management plans, would minimize impacts due to training, operations, and maintenance activities in the long-term. Therefore, no additional mitigation measures are warranted.

#### 4.4.3 Biological Resources

Biological resources include native or naturalized plants and animals and the habitats in which they occur. The dominant plant species make up plant communities, which in turn define the vegetation of an area. Habitat is defined as the area or environment where the resources and conditions are present that cause or allow a plant or animal to live there (Hall *et al.* 1997). Biological resources discussed in this EA include Vegetation, Wildlife, Migratory Birds, and Threatened and Endangered Species, which could potentially be affected by demolition, construction or operational activities associated with the Proposed HBCT Action.

**Vegetation.** Vegetative cover at Fort Benning predominantly consists of a mix of pine and hardwood forested areas. There are more than 1,275 species of plants within the Installation boundary, located within approximately 16,000 acres of lawn and grassed areas, 4,000 acres of open land and fields, and 163,000 acres of woodlands (DA 2009). Loblolly and longleaf pine are the predominant conifers on the Installation, comprising approximately 54,000 acres of the woodlands; the remaining 109,000 acres of woodlands consist of approximately 55,000 acres of other mixed pine species and 54,000 acres of hardwood forest (DA 2009).

Dominant vegetation within and around the Proposed HBCT Action footprint includes longleaf pine (*Pinus palustris*) plantations (ranging in age from 5 to 90 years old) and is the characteristic plant species whose dominance is maintained by the Installation in this ROI. Relatively open woodland vegetation is common on upland areas while lowland areas more often support dense forest.

**Wildlife.** Fort Benning contains a wide variety of more than 350 species of wildlife, including approximately 154 species of birds, 47 species of mammals, 48 species of reptiles, 25 species of amphibians, 67 species of fish, and 9 species of mussels, as well as numerous insects and invertebrate species. The most commonly encountered species found within the Installation include: American alligators, turtles, snakes, wading birds, migratory birds, American beaver, white-tailed deer, feral swine (pigs), eastern wild turkey, eastern gray squirrel, raccoon, rabbits, and other small mammals (DA 2009).

**Migratory Birds.** Approximately 150 species of migratory birds are present (either year-round or seasonally) at Fort Benning. The breeding season for migratory birds is spring through summer (DA 2009). Migratory birds are protected under the MBTA and EO , 13186 which mandates the conservation of migratory birds by Federal agencies and their consideration in the NEPA process.

Fort Benning manages and conserves migratory bird species through its Integrated Natural Resources Management Plan (INRMP) and considers effects to migratory birds in any proposed action via the NEPA process, and in accordance with the DoD-USFWS MOU. This MOU was developed pursuant to EO 13186, and identifies specific activities in which cooperation between the USFWS and the DoD would contribute substantially to the conservation of migratory birds and their habitats.

**State Listed Species.** Four State-listed animal species and 11 State-listed plant species are present within the boundaries of Fort Benning. The four animal species include the Gopher Tortoise (Threatened), Barbour's Map Turtle (Threatened), Alligator Snapping Turtle (Threatened), and the Bluestripe Shiner (Threatened).

**Threatened and Endangered Species.** The Federal Endangered Species Act (ESA) protects Federally listed threatened and endangered plant and animal species. Georgia's Wildflower Preservation Act and Georgia's Endangered Wildlife Act protect State listed species on State land.

Four Federally listed species are present within the boundaries of Fort Benning and include the Red-cockaded Woodpecker (RCW-Endangered), Wood Stork (Endangered), American Alligator (Threatened), and Relict trillium (Endangered). The RCW is the only Federally listed species that could potentially be impacted by the Proposed Action Alternatives. This species is discussed in more detail in the following subsection (**Section 4.4.3.1**).

#### **4.4.3.1 Affected Environment**

The ROI for biological resource analysis includes the Kelley Hill Cantonment Area and the immediately surrounding adjacent lands, and lands adjacent to the Ochillee Tank Trail corridor that could be directly and/or indirectly impacted by the Proposed HBCT Action.

The RCW (*Picoides borealis*) was placed on the Federal Endangered Species List in 1970. The reasons for the species listing included its rarity, documented declines in local populations, and reduction of its natural nesting habitat.

The RCW is a territorial, non-migratory species that lives in family units called groups. They are unique among all woodpeckers in that RCWs are the only species that excavates cavities in mature living pine trees for roosting and nesting. Each RCW group lives in an aggregation of cavity trees called a cluster. A cluster is defined as the aggregation of cavity trees previously or currently used and defended by a group of RCWs that includes a designated 200-foot wide buffer surrounding each tree. An active RCW cluster may be occupied by either a single bird, a mated pair, or a mated pair with helper birds. (Marston 2010).

These clusters are surrounded by contiguous foraging habitat, extending 0.5 miles from each cluster center. Discrete cluster sites are typically located where mature pine trees are more than 60 years in age and equal to or greater than 10 inches dbh. Foraging habitat is more variable, and depends on habitat quality, proximity to cluster sites, and other factors (DA 2009). The breeding season for the RCW is 1 April through 31 July (RCW ESMP 2001; DA 2009).

Fort Benning has one of the larger RCW populations in the southeastern US. The most dense populations of the species occurs in the southern portions of Fort Benning; however, the species is widely dispersed throughout the Installation. As of April 2011, there are currently 305 known active and 15 inactive RCW clusters at Fort Benning; (Neufeldt 2011, pers. comm.)

In May 2009, Fort Benning received a Jeopardy Biological Opinion (JBO) from the USFWS related to the MCoE Biological Assessment (BA) and EIS. This JBO outlined specific criteria that must be met in order for the Installation to proceed with the proposed MCoE actions, including RCW impact minimization measures. These minimization efforts are currently underway. Currently, 63,150 acres of habitat are necessary at Fort Benning to support 421 clusters to meet recovery goals, providing 150 acres of foraging habitat per cluster (Barron 2010).

RCW cavity trees on Fort Benning are marked with two white bands. Banded RCW cavity trees are protected by a 200-foot buffer zone that is marked with white signs. Activities within this 200-foot buffer zone are restricted throughout the year. During the breeding season (i.e. 1 April through 31 July), no construction activities are allowed within 200 feet of an RCW cavity tree. This zone is marked with unique yellow signs within construction areas. At all times, construction is limited to approved areas. Maintained roads and trails that pass through the 200-foot buffer zone may still be used during the breeding season (Barron 2010).

RCW's have benefited from frequent fires and non-agricultural land uses on Fort Benning. Frequent fires are the most necessary component of maintaining open pine stands, which when mature, provide adequate nesting and foraging habitat for the RCW. The timber management practices on Fort Benning include group selection, frequent use of prescribed fire, and single-tree selection for thinning. These methods create the mosaic of openings and pine tree age classes which are beneficial to RCW's and other species found in fire-dependent ecosystems (<https://www-benning.army.mil/emd/conservation/endangered/woodpecker.htm>).

The Proposed Ochiltee Tank Trail upgrade would cross three active RCW foraging habitat partition areas, and could potentially be located in the vicinity of RCW cavity trees/clusters. These three RCW clusters have been given a "take" status due to other BRAC and MCoE construction projects as analyzed in Biological Assessments for the BRAC and MCoE EISs.

**Figure 5** identifies the locations of known habitat and occurrences of the RCW, as well as the 0.5-mile foraging partition around each RCW cluster, and potential RCW habitat that could be potentially affected by construction activities associated with the Ochiltee tank trail upgrade.

There are no State listed Species identified within the vicinity of the Kelley Hill Cantonment Area or the Ochiltee Tank Trail.

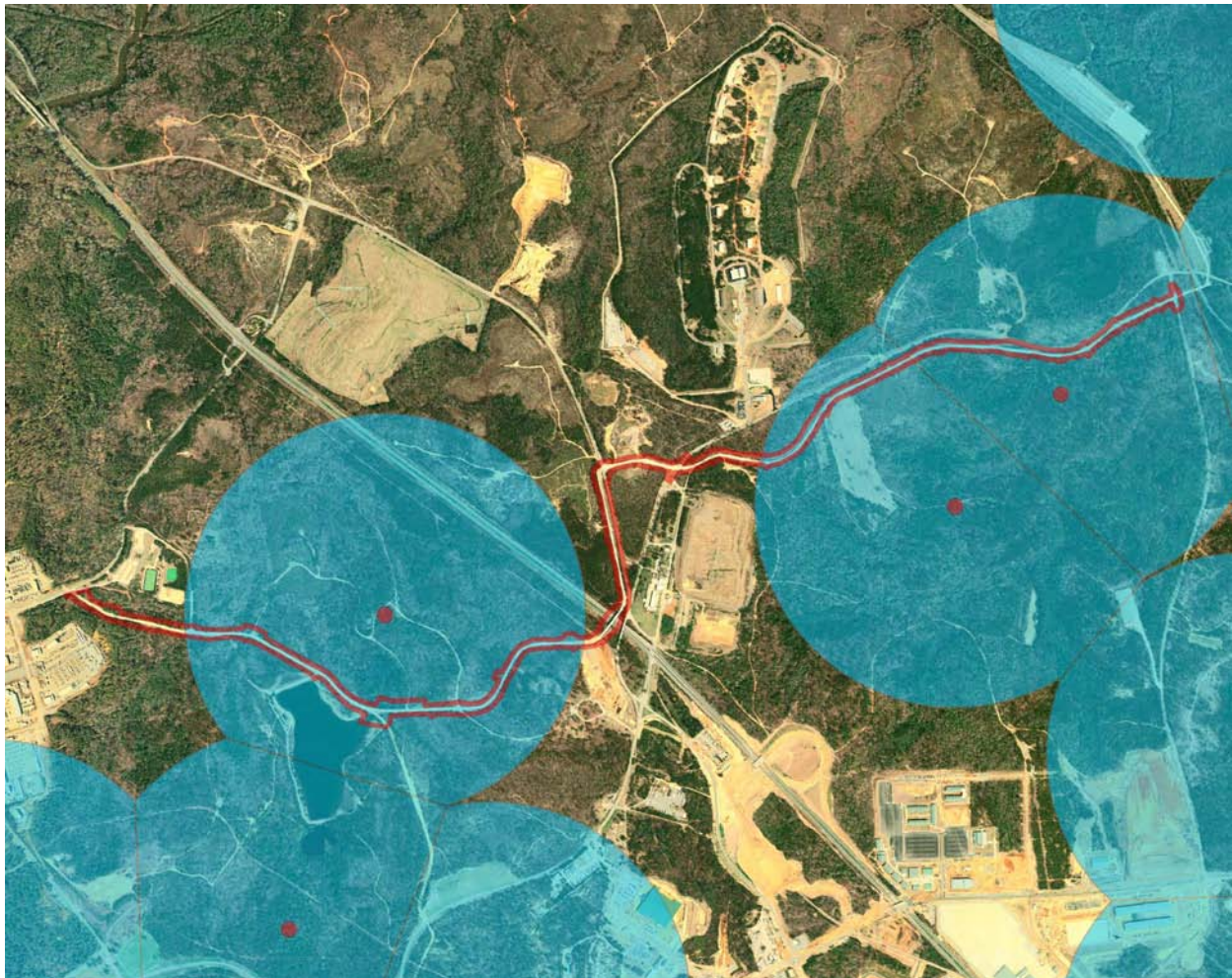
Impacts would be considered significant if one of more of the following conditions would result:

- Substantial loss or degradation of habitat or ecosystem functions (natural features and processes) essential to the persistence of native plant and animal populations
- Substantial loss or degradation of a sensitive habitat, including wetlands that support high concentrations of special status species or migratory birds
- Disruption of a Federally listed species, its normal behavior patterns, or its habitat that

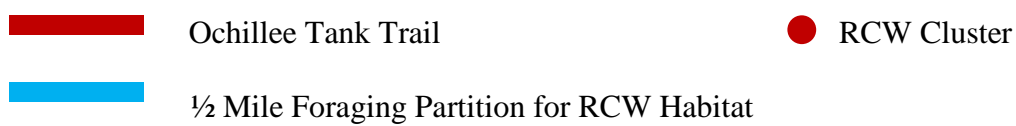


substantially impedes the Installation's ability either to avoid jeopardy or conserve and/or recover the species

The definition of "substantial" is dependent on the species and habitats in question and the regional context in which the impact would occur. Impacts may be considered more adverse if the action affects previously undisturbed habitat or if the impact would occur over a large portion of available habitat in the region.



**Figure 5. Identified RCW Clusters and Foraging Habitat Partitions Along the Ochillee Tank Trail.**



#### 4.4.3.2 Effects of Alternative 3 (Preferred Alternative)

Under the Preferred Alternative, *minor adverse effects* to biological resources, specifically to the federally listed RCW within the ROI would occur during construction. These potential impacts would be minimized through specific mitigation measure as presented in **Section 4.4.3.6**. Specific impacts within this Alternative area could affect approximately 71 acres of pine plantation that is approximately 5-years in age, and is not currently designated as future potential habitat for RCWs.

Per the significance criteria in **Section 4.4.3.1**, the Preferred Alternative would not result in significant adverse effects to any migratory bird populations. The Proposed HBCT Action would not diminish the capacity of a population of migratory bird species to sustain itself at a level that maintains its genetic diversity, to reproduce, and to function effectively in its native ecosystem.

Although this Alternative could result in 236 acres of ground disturbance, the proposed location falls within a previously disturbed area, and any impacts to general vegetation communities and wildlife species at Fort Benning would be *minor*.

#### 4.4.3.3 Effects of Alternative 2

Under this Alternative, *moderate adverse effects* to biological resources, specifically to the federally listed RCW within the ROI would occur during construction. These potential impacts would be minimized through specific mitigation measure as presented in **Section 4.4.3.6**. Specific impacts within this Alternative area could affect approximately 147 acres of pine plantation that is approximately 22-years in age, and is currently designated as future potential habitat for RCWs.

Per the significance criteria in **Section 4.4.3.1**, the Preferred Alternative would not result in significant adverse effects to any migratory bird populations. The Proposed HBCT Action would not diminish the capacity of a population of migratory bird species to sustain itself at a level that maintains its genetic diversity, to reproduce, and to function effectively in its native ecosystem.

Although this Alternative could result in 319 acres of ground disturbance, the proposed location falls within a previously disturbed area, and any impacts to general vegetation communities and wildlife species at Fort Benning would be *minor*.

#### 4.4.3.4 Effects of Alternative 1

Under this Alternative, *moderate adverse effects* to biological resources, specifically to the federally listed RCW within the ROI would occur during construction. These potential impacts would be minimized through specific mitigation measure as presented in **Section 4.4.3.6**. Specific impacts within this Alternative area could affect approximately 62 acres of pine plantation that is approximately 60 to 90-years in age, and is currently designated as future potential habitat for RCWs. If this Alternative was chosen, informal consultation will be

necessary prior to construction activities and would be initiated via the Fort Benning environmental review process.

Per the significance criteria in **Section 4.4.3.1**, the Preferred Alternative would not result in significant adverse effects to any migratory bird populations. The Proposed HBCT Action would not diminish the capacity of a population of migratory bird species to sustain itself at a level that maintains its genetic diversity, to reproduce, and to function effectively in its native ecosystem.

Although this Alternative could result in 319 acres of ground disturbance, the proposed location falls within a previously disturbed area, and any impacts to general vegetation communities and wildlife species at Fort Benning would be *minor*. Impacts to the RCW would be moderate based on the maturity of the pine plantation at this location.

#### **4.4.3.5 Effects of the No Action Alternative**

Under the No Action Alternative, *no adverse effects* to biological resources within the ROI would occur.

#### **4.4.3.6 Mitigation Measures**

Each component and segment of the Proposed HBCT Action would be submitted to the EMD using the Fort Benning environmental review process prior to the time it is proposed for implementation. This process would help ensure that any future changes in the locations of RCW clusters and/or cavity trees, are addressed with the most current information available. For all of the Proposed HBCT Action Alternatives, construction of the HBCT complex and tank trail repairs and upgrades, mitigation measures would be implemented to minimize the effects to biological resources. Mitigation measures would include:

- Minimize impacts to existing and designated Red-cockaded Woodpecker (RCW, a federally listed endangered species) habitat, and all pine trees measuring equal to or greater than 10 inches diameter breast height (dbh).
- Construction activities would be limited within 200-feet of all RCW cavity trees during the 1 April through 31 July breeding season.
- Upgrades and repairs to the Ochillee tank trail would be limited to the trail's exiting footprint. No pine trees larger than 6 inches in dbh will be removed for this project component. Only scrub and brush overgrowth from lack of tank trail maintenance is to be removed.
- To the extent possible, plan construction activities avoid the primary nesting periods (April through July) of migratory birds protected under the MBTA.

#### **4.4.4 Cultural Resources**

Cultural resources include: historic properties as defined in the NHPA, cultural items as defined in the NAGPRA, archaeological resources as defined in the Archaeological Resources Protection Act (ARPA), sacred sites as defined in EO 13007 to which access is provided under the American Indian Religious Freedom Act (AIRFA), and collections as defined in 36 CFR Part 79, *Curation of Federally Owned and Administered Collections*. Requirements set forth in the NEPA, NHPA, ARPA, NAGPRA, AIRFA, 36 CFR Part 79, EO 13007, and the *Presidential Memorandum on Government-to-Government Relations with Native American Tribal Governments* define the basis of the Army's compliance responsibilities for management of cultural resources. Regulations applicable to the Army's management of cultural resource include those promulgated by the Advisory Council on Historic Preservation (ACHP) and the National Park Service, and as prescribed in Army Regulation (AR) 200-1.

Management of cultural resources on Fort Benning is accomplished through the Installation's Integrated Cultural Resources Management Plan (ICRMP 2008). Fort Benning has also adopted the Army Alternate Procedures (AAP) for implementing the NHPA in an effort to improve efficiency in the Installation's Cultural Resources Management (CRM). The Historic Properties Component (HPC) of the ICRMP: 1) provides Standard Operating Procedures (SOPs) for assessing the Proposed HBCT Action and the potential effects on the Installation's historic properties; and 2) replaces the NHPA Section 106 procedures (DA 2006). Cultural resources found within the boundaries of Fort Benning include: archaeological resources, architectural resources and historic districts, cemeteries, and Native American resources.

***Archaeological Resources.*** All of the areas of Fort Benning, except those that pose threats to human health and safety, have been surveyed and inventoried for archaeological resources (ICRMP 2008; DA 2009). As a result, 3,982 archaeological sites have been recorded on the Installation.

***Architectural Resources.*** Fort Benning's Real Property Inventory included over 1,700 standing structures with the primary concentration of these structures occurring within the established Cantonment Areas on the Installation. The historic buildings on Fort Benning range from around 1910 to 1955 (DA 2004). There are approximately 670 historic buildings that have been determined either individually eligible to the NRHP or contributing to an eligible historical district.

Under the NHPA as amended, only cultural resources included in or eligible for inclusion on the National Register of Historic Places (NRHP), defined as 'historic properties', warrant consideration with regard to adverse impacts from a proposed action. Historic properties generally must be more than 50 years old to be considered for protection under the NHPA. However, under the NHPA, more recent structures, such as Cold War era military buildings, may warrant protection if they are "exceptionally significant." To be considered eligible for the NRHP, cultural resources must meet one or more criteria as defined in 36 CFR 60.4 for inclusion on the NRHP. These criteria include association with an important event, association with a famous person, embodiment of the characteristics of an important period in history, or the ability

to contribute to scientific research. Resources must also possess integrity (i.e., its important historic features must be present and recognizable.) Historic properties may be buildings, structures, historic districts, or objects.

**Cemeteries.** Approximately 80 historic cemeteries have been inventoried and delineated at Fort Benning. These cemeteries, managed by Fort Benning, are located throughout the Installation but are more frequent in the southeastern and northern portions.

**Native American Resources and Consultation.** In 2000, an ethnographic overview study identified Federally recognized Native American Tribes that are associated with Fort Benning lands (Hamilton updated 2010). This study and consultation efforts, have resulted in the identification of the following 11 consulting Tribes:

1. The Alabama-Coushatta Tribe of Texas
2. The Alabama-Quassarte Tribe of Oklahoma
3. The Chickasaw Nation of Oklahoma
4. The Kialegee Tribal Town of the Creek Nation of Oklahoma
5. The Mississippi Band of Choctaw Indians
6. The Muscogee (Creek) Nation of Oklahoma
7. The Poarch Band of Creek Indians
8. The Seminole Nation of Oklahoma
9. The Seminole Tribe of Florida
10. The Thlopthlocco Tribal Town
11. The United Keetoowah Band of Cherokee Indians of Oklahoma.

Of the 11 Tribes listed above, no Tribe has identified a property of traditional religious or cultural importance on Fort Benning managed lands (DA 2009). Please refer to **Section 2.5.2** for a discussion of Fort Benning's Native American Consultation process.

#### **4.4.4.1 Affected Environment**

The ROI for cultural resource analysis includes the Kelley Hill Cantonment Area and the immediately surrounding adjacent lands, and lands adjacent to the Ochillee Tank Trail corridor that could be directly and/or indirectly impacted by the Proposed HBCT Action.

There are no known cemeteries located within the Proposed Action Alternatives, and as stated in the previous section, no Tribe has identified a property of traditional religious or cultural importance on Fort Benning managed lands. Therefore, there will be *no short- or long-term*

*adverse effects* to cemeteries or Tribal religious or cultural resources as a result of the Proposed HBCT Action.

As part of the Proposed HBCT Action, 29 buildings and structures have been identified for demolition. Although the majority of these buildings were constructed over 50 years ago, recent cultural surveys performed in 2003 identified these buildings and structures as “Cold War Era” military buildings. Per the NRHP criteria defined in 35 CFR 60.4, (and previously discussed in **Section 4.4.4**), none of these building or structures were determined to be eligible for inclusion on the NHRP. Therefore, there will be *no short- or long-term adverse effects* to architectural resources as a result of the Proposed HBCT Action.

There are three identified archaeological cultural resource sites within the APE for the Proposed HBCT Action. Each site potentially affected by the proposed construction of the HBCT Complex is discussed in the subsections below per Alternative. There are no archaeological cultural resources site identified along the Ochiltee Tank Trail corridor, and as all repairs and upgrades would be confined to the existing, previously disturbed trail. As such, there are not anticipated effects to cultural resources within the APE of the Ochiltee Tank Trail.

An alternative would have a significant effect on cultural resources if it would:

- Result in damage, destruction, or demolition to an archaeological site or building that is eligible or listed on the NRHP (i.e., an historic property), and that cannot be fully mitigated.
- Eliminate access to resources of value to federally recognized Native American Tribes.

The impact analysis for cultural resources focuses on properties that are listed on or considered eligible for the NRHP, as well as resources that are considered sensitive by Federally recognized Native American Tribes (i.e., in accordance with the AIRFA, EO 13007, and NAGPRA). The threshold also applies to any cultural resource that has not yet been evaluated for its eligibility to the NRHP.

#### **4.4.4.2 Effects of Alternative 3 (Preferred Alternative)**

Under the Preferred Alternative, *no adverse effects* to cultural resources within the Area of Potential Effect (APE) would occur during construction. No long-term effects to cultural resources would be anticipated, however, one NHRP-eligible site (9CE198 – consisting of Prehistoric Indian Lithic Scatter) occurs within the proposed construction footprint of Alternative 3. If this Alternative is chosen for implementation, and the site cannot be avoided through project design, it will be required to be mitigated through excavation and data recovery. *No adverse effects* are anticipated.

#### **4.4.4.3 Effects of Alternative 2**

Impacts under this Alternative would be similar to the Preferred Alternative, resulting in *no adverse effects* to cultural resources within the APE during construction. No long-term effects to cultural resources would be anticipated, however, there are two NRHP-eligible sites for this proposed action area (i.e., 9CE691 and 9CE693, both consisting of Prehistoric Indian Artifact or Shell Scatter). If this Alternative is chosen for implementation, and the sites cannot be avoided through project design, it will be required to be mitigated through excavation and data recovery. *No adverse effects* are anticipated.

#### **4.4.4.4 Effects of Alternative 1**

Impacts under this Alternative would be similar to the Preferred Alternative, resulting in *no adverse effects* to cultural resources within the APE during construction. No long-term effects to cultural resources would be anticipated, however, there is one NRHP-eligible sites for this proposed action area (i.e., 9CE691 – consisting of Prehistoric Indian Artifact or Shell Scatter). If this Alternative is chosen for implementation, and the sites cannot be avoided through project design, it will be required to be mitigated through excavation and data recovery. *No adverse effects* are anticipated.

#### **4.4.4.5 Effects of the No Action Alternative**

Under the No Action Alternative, *no adverse effects* to cultural resources within the APE would occur.

#### **4.4.4.6 Mitigation Measures**

As described in **Sections 2.5.2 and 4.4.4**, Fort Benning regularly consults with 11 Federally recognized Tribes. Although no Tribe has identified a property of traditional religious or cultural importance on Fort Benning managed lands, Fort Benning will provide a copy of this Final EA to these 11 Tribes for review and comment prior to making any decision concerning this Proposed HBCT Action in accordance with applicable requirements and Fort Benning's established Tribal consultation process. Any additional mitigation measures identified as needed during the Tribal consultation process would be implemented, as appropriate.

Each component and segment of the Proposed HBCT Action would be submitted to the EMD using the Fort Benning environmental review process prior to the time it is proposed for implementation. This process would help ensure that any previously identified cultural resource sites or properties, are addressed with the most current information available. For all of the Proposed HBCT Action Alternatives, construction of the HBCT complex and tank trail repairs and upgrades, mitigation measures would be implemented to minimize the effects to cultural resources. Mitigation measures would include:



- Field determine and flag the boundaries of all eligible cultural resources sites within the proposed action locations.
- Using the above data, locate all project construction components at a minimum distance of 25 feet from the edge of all NRHP-eligible cultural resources sites.
- Minimization of adverse effects to avoid cultural sites through project design, if avoidance is not possible, then excavation and data recovery would be implemented.
- Construction activities would be monitored in the vicinity of NRHP-eligible cultural resources to ensure construction is conducted in accordance with the final design and adverse effects are avoided. A qualified archaeological site monitor shall observe construction activities in such locations.
- In the event of an inadvertent discovery of human remains or cultural items during project construction, construction activities in that area shall be halted and the area cordoned off until the Fort Benning Cultural Resources Management is contacted to properly identify, and appropriately treat discovered items in accordance with applicable laws and regulations. As appropriate, notification of concerned Tribes would occur once a qualified archaeologist makes an initial determination.

Implementation of these detailed mitigation measures would ensure that adverse affects to NRHP-eligible sites are avoided during and after project implementation under any of the Action Alternatives.

#### **4.4.5 Hazardous and Toxic Materials and Waste**

Hazardous materials and waste are identified and regulated under the Comprehensive Environmental Response, Compensation, and Liability Act; the Occupational Safety and Health Act; the Resource Conservation and Recovery Act (RCRA); the Federal Insecticide, Fungicide, and Rodenticide Act; and the Emergency Planning and Community Right-to-Know Act. The Clean Water Act also addresses hazardous materials and waste through Spill Prevention, Control, and Countermeasure (SPCC) and NPDES requirements. Hazardous materials have been defined to include any substance with special characteristics that could harm people, plants, or animals when released. Various state laws also regulate the management and disposal of hazardous materials and waste.

Hazardous waste is defined in the RCRA as any “solid, liquid, contained gaseous or semisolid waste, or any combination of wastes that could or do pose a substantial hazard to human health or the environment.” Waste may be classified as hazardous because of its toxicity, reactivity, ignitibility, or corrosivity. In addition, certain types of waste are “listed” or identified as hazardous in 40 CFR 263.



#### **4.4.5.1 Affected Environment**

Hazardous and Toxic Materials and Waste (HTMW) exist within the Kelley Hill Cantonment Area and consist of, but are not limited to, asbestos and lead-based paint in older buildings, regulated wastes, petroleum products, and Solid Waste Management Areas/Units. Based on examination of existing Fort Benning HTMW data, including mapping of known HTMW areas, the Proposed HBCT Action, under all Action Alternatives, would not be located within an area known to be contaminated with or to contain HTMW (T. Williams 2011).

As part of the Proposed HBCT Action, 29 buildings and structures have been slated for demolition (see Appendix C for the demolition list). The majority of these facilities were constructed in the 1950's, it is assumed that lead-based paint (LBP) and asbestos containing materials (ACM) are present. All buildings and structures will be required to be inspected and abated for LBP and ACM prior to any demolition activities. All building materials and wastes generated prior to and during demolition would be disposed of in accordance with all applicable Federal, State and Army regulations.

Similar to the operations currently ongoing in the Kelley Hill maintenance facilities, the Proposed HBCT Complex operations will also necessitate the use and storage of hazardous materials and wastes. Routine operations require the use of a variety of hazardous materials, including petroleum, oil and lubricant products, solvents, cleaning agents, paints, adhesives, and other products necessary to perform vehicle and equipment maintenance, military training activities, installation upkeep, and administrative and housing functions. Nevertheless, Fort Benning's Hazardous Waste Management Plan (HWMP), outlines the correct procedures for such activities.

Impacts of the Proposed Action Alternatives or the No Action alternative would be considered significant if they present a substantial risk of release of hazardous materials/wastes that could create a potential public health hazard to people or the environment and/or if existing storage and disposal facilities could not adequately serve the waste handling requirements.

#### **4.4.5.2 Effects of the Proposed HBCT Action Alternatives**

All of the Action Alternatives include the demolition of 29 buildings and structures totaling approximately 61,300 square feet. The current facilities and structures, (e.g. grease racks, oils storage buildings, maintenance shops, etc.), proposed for demolition will no longer be needed as they will be replaced with the newer and updated facilities for the operation of the Proposed HBCT Complex. As previously discussed, LBP and ACM are presumed to be present due to the construction date of these facilities. All buildings and structures will be required to be inspected and abated for LBP and ACM prior to any demolition activities. All building materials and wastes generated prior to and during demolition would be disposed of in accordance with all applicable Federal, State and Army regulations. There would be no need for additional municipal solid or hazardous waste disposal facilities, therefore there would be *minor* effects resulting from demolition and disposal activities associated with the Action Alternatives.

In the short term, the quantity of hazardous materials such as Petroleum, Oil, and Lubricants (POLs) would increase in support of the construction activities. Quantities of various fuels in excess of current operating demand would be required for construction activities due to the use of mobile-power generators and heavy equipment. In the long-term, the number of sites storing, using, and handling hazardous materials would increase slightly due to the projected increase of military vehicles and maintenance operations. The risk of uncontrolled release of hazardous substances would be minimized by following applicable Federal and State laws and regulations and Army policy for storage of fuels (e.g., double-walled aboveground storage tanks equipped with leak detection systems) and other hazardous materials (e.g., self-contained storage cabinets with appropriate flammability ratings). Potential spills from the secondary containment structures associated with any above ground storage tanks or spills in uncontained areas would be contained by using absorbent materials, portable booms, or other barriers. If the construction of the HBCT Complex and tank trail upgrade is implemented, adherence to existing material and waste management plan and procedures for handling, storage, and disposal of these substances would preclude any long-term, adverse impacts. In summary, it is anticipated that if the any of the Proposed Action Alternatives were implemented, there would *minor* effects, both *short-* and *long-term* resulting from hazardous material storage and handling.

#### **4.4.5.3 Effects of the No Action Alternative**

Under the No Action Alternative, no effects to HTMW would occur as the Proposed HBCT Action would not be implemented. There would be no demolition of current maintenance facilities, and the current uses and storage of hazardous materials and wastes would not change.

#### **4.4.5.4 Mitigation Measures**

During construction activities under all of the Action Alternatives, the handling, disposal, use, and storage of solid waste, (including HTMW), would be in accordance with all applicable Federal and State laws and requirements. This would include any proposed work within or near buildings known or suspected of containing asbestos-containing materials, lead-based paint, polychlorinated biphenyls, or other potential HTMW. All buildings and structures will be required to be inspected and abated for LBP and ACM lead-based paint and asbestos containing materials prior to any demolition activities.

All demolition, construction, and facility maintenance activities would comply with Fort Benning's Hazardous Waste Management Plan (HWMP, 2010), for addressing such materials. In addition, the required NPDES permit would prescribe measures to address potential spills during construction (see **Section 5.3**). Adherence to Federal and State laws and regulations, as well as Installation management plans, would minimize impacts due to demolition, construction, training, and maintenance operations activities in the long-term. Therefore, no additional mitigation measures are warranted.

## **5.0 CUMULATIVE EFFECTS**

### **5.1 INTRODUCTION**

As defined by CEQ Regulations in 40 CFR Part 1508.7, cumulative effects are those which “result from the incremental impact of the Proposed Action when added to other past, present, and reasonably foreseeable future actions, without regard to the agency (Federal or non-Federal) or individual who undertakes such other actions.” Cumulative effects analysis captures the effects that result from the Proposed Action when considering the effects of other actions taken during the duration of the Proposed Action in the same ROI. Cumulative effects may be accrued over time and/or in conjunction with other pre-existing effects from other activities in the area (40 CFR 1508.25); therefore, pre-existing impacts and multiple smaller impacts should also be considered.

Cumulative effects analysis must determine if the Proposed HBCT Actions in this EA could have the possibility of either adverse or positive incremental impacts when considering other past, present, and foreseeable future projects in the HBCT's ROI. For this EA, the defined ROI includes the lands within the Kelley Hill Cantonment Area, the Ochillee Tank Trail corridor, and the immediately adjacent, surrounding lands. The time-frame applied for this analysis covers the next five years, as an appropriate planning horizon for the Proposed HBCT Action and other future activities reasonably foreseeable and planned at Fort Benning. The scope of the cumulative, incremental impacts analysis, therefore, includes those activities associated with the HBCT and those identified in prior and current final NEPA documents for Fort Benning. These reasonably foreseeable future projects extend to approximately FY2016.

### **5.2 RECENT AND FORESEEABLE FUTURE PROJECTS IN THE REGION OF INFLUENCE**

Fort Benning is undergoing robust growth and development in response to multiple, Army required initiatives including, but not limited to, BRAC 2005, Army Modular Force, Grow the Army, and the associated MCoE. Multiple development projects within Fort Benning have been recently constructed, are underway, or are planned. These projects have been assessed in compliance with NEPA, and the appropriate decision documents have been signed. Relevant previous NEPA disclosure and decision documents can be found at Fort Benning's public notices webpage ([https:// www.benning.army.mil/garrison/DPW/EMD/legal.htm](https://www.benning.army.mil/garrison/DPW/EMD/legal.htm)). The following list is an overview of various types of recent actions identified with completed NEPA analysis and documentation for Fort Benning, within the HBCT ROI:

1. The Proposed Implementation of the Installation Information Infrastructure Modernization Plan (I3MP) at Fort Benning, Georgia (September 2010). Final EA and FNSI reached 22 November 2010.
2. The Maneuver Center of Excellence (MCoE) at Fort Benning, Georgia (June 2009). Final EIS and ROD reached 4 August 2009.

3. The Outdoor Recreation Plan at Fort Benning (January 2009). Final EA and FNSI reached 15 January 2009.
4. The Infrastructure Footprint Reduction Program at Fort Benning (March 2008). Supplemental Final EA and FNSI reached 15 May 2008.
5. The BRAC 2005 and Transformation Actions at Fort Benning, Georgia (October 2007). Final EIS and ROD reached 29 November 2007.

In addition, the following actions are also undergoing current (not yet complete) NEPA analysis at Fort Benning, and are considered reasonably foreseeable within the ROI to potentially occur in the next five years:

- ***Central Issuing Facility (CIF).*** This project proposes construction of a CIF Warehouse in Kelley Hill Cantonment Area at the intersection of Ivy and 1<sup>st</sup> Division Roads, approximately 1 mile from the Proposed HBCT Complex Alternatives locations. The primary mission of the CIF is to provide a single point for receipt, storage, issue, exchange, and return of all authorized organizational clothing and individual equipment items. The functional and operational requirements of the CIF require that the design be based on the characteristics of the material being handled and stored, the volume and flow pattern through the facility, and the inventory pattern. Therefore, the overall building design and configurations will vary as required to meet project specific requirements.
- ***Ochillee Rail Loading Facility Expansion Relocation.*** Originally identified in the BRAC/MCoE EISs (PN62953), this project will potentially involve the construction of approximately 26,400 linear feet of rail car storage track ballast, and cross ties, (6 new rail spurs) adjacent to the State of Georgia Department of Transportation (GADOT) railroad that lies within the Fort Benning. This project was originally sited of the area known as "Ochillee Junction" at the intersection of Wood Road and First Division Road, which also coincides with the location of the terminus of the Ochillee Tank Trail (as described in this EA as part of the Proposed HBCT Action.) This project will also involve the construction of a crossover track and switching system between the Norfolk Southern Railroad Company railroad line. At the existing Ochillee Railhead, the project will widen the existing concrete tank trail for additional vehicle staging/parking space. Railroad crossing warning signal systems (with flashing lights and gate assemblies) are to be constructed at primary road crossings.
- ***Kefurt Fitness Center.*** The Kefurt Fitness Center (building 9001 in the Kelley Hill Cantonment Area) currently is a 20,322 square-foot (SF) fitness facility. Built in 1961, the facility is a high-bay, single-story structure with concrete masonry unit exterior and interior walls. Proposed renovations include converting the existing racquetball courts into a weight training area (3,700 SF) and construct a 4,000 SF two-story addition for cardiovascular exercise, relocated from Outpost Harry Fitness Center. Site work includes

40 new parking spaces and demolition of one or two small office buildings, to be determined.

- **Kelley Hill Recreation Center/Outpost Harry Fitness Center.** This project would include a 69,126 SF addition to the existing fitness center and complete renovations of the existing 27,471 SF recreation center space. The current Kelley Hill Recreation Center/Outpost Harry Fitness Center (building 9079) includes a 23,517 SF recreation center and a 3,954 SF fitness component. It is a low-slung, single-story, brick-clad building built in 1965. It provides services to soldiers of the 3<sup>rd</sup> Brigade and features TV/movie rooms, a no-fee internet café, game rooms with billiards, X-Box game stations, board games/card games, musical instruments, a snack bar, and a functional area with kitchen access, projector, and computer sound system for unit briefings and events. Proposed renovations include conversion of approximately 9,000 SF of building area to provide activity rooms with movable partitions, updated ADA compliant restrooms, and updated office areas including adding air conditioning. Site work includes constructing 200 new parking spaces.

### 5.3 CUMULATIVE EFFECTS ANALYSIS

Analysis of the Proposed HBCT Action, under any of the Action Alternatives, resulted in a finding of *short-term, minor* and *moderate* adverse effects on *Soils, Water Resources and Wetlands, Biological Resources, Cultural Resources, and Hazardous and Toxic Materials and Wastes* that will be further analyzed in this section of the EA. As shown in the below analysis, these *minor* and *moderate* adverse impacts do not result in significant adverse cumulative effects when considering all other past, present, and reasonably foreseeable future construction and training increases at Fort Benning.

The remaining VECs previously discussed in **Section 4.3** of this EA, would not be affected by the Proposed HBCT Action. As such, impacts to *Land Use, Air Quality, Noise, Socioeconomics and Environmental Justice* were not analyzed as the potential for impacts to these resources were considered to be negligible or nonexistent. As such, there will be no cumulative impacts to these resources and will not be discussed in further detail in this section.

#### 5.3.1 Soils

In total, construction projects currently occurring or occurring within the reasonably foreseeable future that would be considered cumulative could impact approximately 236 acres for the Preferred Alternative including the HBCT Complex in the Kelley Hill Cantonment Area and the Ochiltee Tank Trail corridor. Soils impacts for Alternative 2 and Alternative 1 could impact approximately 319 acres and 245 acres respectively for the HBCT Complex and the Ochiltee Tank Trail. Therefore, no cumulative impacts to soils are anticipated from implementation of any of the Proposed Action Alternatives.

Under the No Action alternative, none of the construction projects would occur and there would be no changes to land use conditions. As such, there would be no cumulative impacts to soils under the No Action alternative.

### 5.3.2 Water Resources and Wetlands

As stated in **Section 4.4.2.1** there are no floodplains located within the ROI of the Kelley Hill Cantonment Area or the Ochillee Tank Trail corridor. Therefore, this resource were not carried forward into the cumulative impacts analysis.

Implementation of any of the Proposed Action Alternatives has the potential to temporarily increase localized erosion rates to a number of creeks and tributaries during construction activities within and adjacent to the HBCT Complex and Ochillee Tank Trail project footprints. The Preferred Alternative could potentially impact approximately 2,144 linear feet of streams and 4 acres of wetlands. Alternative 2 could potentially impact approximately 4,859 linear feet of streams and one acre of wetlands. Alternative 1 does not contain any delineated wetlands within the proposed construction footprint, but could potentially impact approximately 3,390 linear feet of streams. However, BMP's implemented as required by NPDES construction permitting and other Federal and State regulations and permitting requirements, would minimize the sedimentation into these creeks, tributaries, and wetlands during demolition and construction, therefore, no water quality threshold exceedance is expected to occur.

Long-term impacts due to training, operations, and maintenance activities would be minor, assuming that the 3<sup>rd</sup> ID would adhere to all Federal and state laws, regulations and permit requirements per the Clean Water Act, Georgia Erosion and Sedimentation Control Act, and NPDES to protect water quality. Although there is a potential for cumulative impacts when considered with past, present, and future actions occurring near the Proposed Action Alternatives sites, they are not expected to be significant since BMPs would be incorporated into the project to prevent significant amount of sediments from entering surface waters and minimize impacts to water quality.

Under the No Action alternative, none of the construction projects would occur and there would be no changes to water resources. As such, no cumulative impacts to water resources are anticipated under the No Action alternative.

### 5.3.3 Biological Resources

As stated in **Section 4.4.3.1**, there are no State-listed species within the ROI for the Preferred Alternative. Construction of the HBCT Complex and upgrades to the Ochillee Tank Trail would result in *minor and moderate adverse effects* to the RCW, the only Federally listed species affected by the Proposed HBCT Action.

Construction of the HBCT Complex at the Preferred Alternative site could potentially remove up to 71 acres of pine plantation that is not designated as current or future RCW habitat resulting in a *minor* impact if chosen for implementation. Conversely, pine plantations within the proposed

construction footprints for Alternatives 2 and 1 have been designated as future potential RCW habitat, and would result in a *moderate* impact if these Alternatives were chosen for implementation. It is projected that Alternative 2 could potentially affect approximately 147 acres RCW habitat, and Alternative 1 could potentially affect 62 acres.

The Ochillee Tank Trail corridor encompasses approximately 58 acres, but all repairs and upgrades will take place within the existing, previously disturbed trail. The tank trail traverses through three active RCW foraging partitions, and could potentially be located in the vicinity of RCW cavity tress/clusters. These three RCW clusters have been given a “take” status due to other BRAC and MCoE construction projects as analyzed in Biological Assessments for the BRAC and MCoE EISs. Only scrub-shrub overgrowth is projected to be removed from the tank trail, and no pine trees greater than, or equal to 6 inch dbh will be allowed to be removed from the tank trail area. This would minimize potential impacts to RCW habitat. Additionally, any portion of the tank trail that comes within 200-feet of an active RCW tree/cluster, would be subjected to construction restrictions during the 1 April through 31 July breeding season.

The previously mentioned foreseeable projects in Section 5.2 occur primarily within the Kelley Hill Cantonment Area boundaries, and are located in areas that have been previously disturbed and not designated as current or future habitat for RCWs. The Ochillee Rail Loading Facility Expansion Relocation project location would occur in an area that is not currently within an RCW foraging habitat partition, but is projected to be within a future cluster foraging habitat partition. Because this proposed project is being relocated from the original siting in the BRAC and MCoE EISs, it will require its own separate NEPA analysis for potential environmental and socioeconomic impacts.

When combined with the reasonably foreseeable projects proposed for the ROI of the HBCT Action, implementation of the any of the Proposed Action Alternatives would not have a cumulative impact to RCW foraging habitat. Under the No Action alternative, none of the construction projects would occur and there would be no changes to biological resources. As such, no cumulative impacts to biological resources are anticipated under the No Action alternative.

#### **5.3.4 Cultural Resources**

Cumulative effects of cultural resources for the all of the Proposed Action Alternatives would be contained within the Installation and would be similar to the environmental consequences provided in **Section 4.4.4.2**, in that cultural resources could potentially be affected where cultural sites may not be avoidable through project design, or in instances where ground disturbance could potentially expose unknown cultural resources. Structures proposed for demolition as part of this action have previously been surveyed and have been determined not to be eligible according to NHRP criteria. Therefore, there would be no impacts to historic properties as a result of implementing the Preferred Alternative. In the APE, these impacts can be avoided, minimized, or mitigated, but would have a collective effect in reducing the overall number of cultural sites on Fort Benning and in the surrounding region. There would be no adverse impact for cultural resources because of avoidance, or mitigation by excavation and/or data recovery

with appropriate documentation. All future construction projects would be under the same regulatory requirements for mitigation and there would be no cumulative effects to cultural resources under any of the Alternatives discussed in this EA.

### 5.3.5 Hazardous and Toxic Materials and Wastes

Cumulative effects of HTMW for the all of the Proposed Action Alternatives would be contained within the Installation and would be similar to the environmental consequences provided in **Section 4.4.5.2**. All of the Proposed Action Alternatives include the demolition of 29 buildings and structures totaling approximately 61,300 square feet. All building materials and wastes generated prior to and during demolition would be disposed of in accordance with all applicable Federal, State and Army regulations. There would be no need for additional municipal solid or hazardous waste disposal facilities, therefore there would be *minor* effects resulting from demolition and disposal activities associated with the Action Alternatives.

The risk of uncontrolled release of hazardous substances would be minimized by following applicable Federal and State laws and regulations and Army policy. For all of the Proposed Action Alternatives, adherence to existing material and waste management plan and procedures for handling, storage, and disposal of these substances would preclude any long-term, adverse impacts. In summary, it is anticipated that if the any of the Proposed Action Alternatives were implemented, there would *minor* effects, both *short-* and *long-term* resulting from hazardous material storage and handling.

All future construction projects would be under the same regulatory requirements for the use, storage, and handling of HTMW and therefore there would be no cumulative effects to HTMW. Under the No Action alternative, none of the construction projects or demolition activities would occur. As such, no cumulative impacts to HTMW are anticipated under the No Action alternative.

## 5.4 CONCLUSION

The analysis contained in this EA indicates that for the most part, any of the Action Alternatives would have only *short-term*, *minor* adverse effects to soils, water resources and wetlands, and HTMW due to demolition, construction, and operational activities associated with the implementation of the HBCT Complex and Ochillee Tank Trail upgrade. Adherence to Federal and State laws and regulations, as well as Installation management plans, would minimize impacts due to demolition, construction, training, and maintenance operations activities in the *long-term*.

Under any of the Action Alternatives, *no adverse effects* to cultural resources within the Area of Potential Effect (APE) would occur during construction. No *long-term* effects to cultural resources would be anticipated, however, if any cultural site cannot be avoided through project design, it will be required to be mitigated through excavation and data recovery. There would be no *short-* or *long-term* adverse effects to architectural resources as the facilities proposed for



demolition as part of this Proposed Action are not eligible for inclusion on the NHRP. Additionally, there are no known cemeteries or Tribal religious or cultural sites that would be affected by any of the Action Alternatives.

Potential impacts to RCWs for Alternative 3 would be *minor* as current pine plantations at this location have not been designated as current or future potential habitat. Potential impacts to RCWs for Alternatives 2 and 1 would be *moderate* as pine plantations at these locations are an older age class and have been designated as future potential habitat. No significant adverse impacts to any resources are anticipated either in a *long-* or *short-term* basis.

After evaluation of impacts it is concluded that the Preferred Alternative (Alternative 3), with its associated facility construction, demolition, and tank trail upgrades would meet the purpose and need for the 3<sup>rd</sup> ID HBCT Complex. The EA analysis demonstrated that with adherence to applicable Federal and State environmental laws, regulations, and permitting processes no significant adverse environmental impacts would result from the proposed action as implemented by Alternative 3.

The No Action Alternative would not meet the purpose and need for providing adequate maintenance facilities to support operations of the 3<sup>rd</sup> ID.

## 6.0 REFERENCES

*The EA incorporates by reference applicable provisions of the following documents:*

Anderson, D.G., and Hanson, J.J. 1988. Prehistory and History along the Upper Savannah River: Technical Synthesis of Cultural Resource Investigations. Richard B. Russell Multiple Resource Area, Volumes I & II. Russell Papers, Southeast Archeological Center. National Park Service. Tallahassee, FL.

AR 200-1, Environmental Protection and Enhancement, Headquarters, Department of the Army, Washington, DC, 1997.

AR 200-3, Natural Resources - Land, Forest and Wildlife Management, Headquarters, Department of the Army, Washington, DC, 1995.

Barron, Michael. 2010. Red-cockaded Woodpecker Wildlife Biologist, Fort Benning, Georgia.

Deaver, S. 2000. An Ethnographic Overview of the Fort Benning Military Reservation. GA and AL. November.

Elliott, D.T., Hamilton, J.L., Thomason P., Emrick, M. and Stoops, R.W., Jr. 1995. Historic Preservation Plan for the Cultural Resources on U S. Army Installations at Fort Benning Military Reservation. Chattahoochee and Muscogee Counties, GA, and Russell County, AL. Submitted by Garrow & Associates, Inc. For the Southeast Archeological Center, National Park Service. Tallahassee, FL.

Endangered Species Act of 1973 (as amended), USFWS, Washington, DC, 1988.

Energy Independence and Security Act (EISA), Section 438 *Storm Water Runoff Requirements for Federal Development Projects*, 2007.

Environmental Analysis of Army Actions; Final Rule, 32 Part 651, Department of the Army, Washington, DC, 2002.

Executive Order (EO) 11990, *Protection of Wetlands*, 1977.

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 1994.

Executive Order 13045, *Protection of children from Environmental Health and Safety Risks*, 1997.

Executive Order 13514; *Federal Leadership in Environmental, Energy, and Economic Performance*, 2009.

Fort Benning. 2008. Integrated Cultural Resources Management Plan (ICRMP). August.

\_\_\_\_\_.2006a. US Army Infantry Center. Fort Benning, GA & AL. Historic Properties Component of the Integrated Cultural Resources Management Plan (ICRMP). For Certification under the Army Alternative Procedures for Historic Properties. February.

\_\_\_\_\_.2006b. Hazardous Waste Program. US Army Infantry Homepage. Environmental Management Division. Accessible at [http://www.benning.army.mil/emd/\\_program\\_mgt/hazardous\\_waste/index/htm](http://www.benning.army.mil/emd/_program_mgt/hazardous_waste/index/htm)

\_\_\_\_\_.2006c. Existing Conditions Section for the Draft Fort Benning Comprehensive Traffic Study. Fort Benning, GA.

\_\_\_\_\_.2005a. Fort Benning Environmental Action Plan. Fort Benning, GA.

\_\_\_\_\_.2005b. Fort Benning Installation Action Plan. Fort Benning, GA.

\_\_\_\_\_.2005c. Environmental Assessment for Development and Implementation of a Historic Properties Component (HPC) Plan for Fort Benning in Accordance with Army Alternative Procedures. Prepared for Fort Benning, GA. October.

\_\_\_\_\_.2004. Historic Properties Component (HPC) of the ICRMP for Fort Benning. Third draft. Department of the Army. US Army Infantry Center. Fort Benning, GA & AL, For Certification under the Army Alternate Procedures for Historic Properties. In lieu of 36 CFR Part 800 for Section 106. Compliance with the National Historic Preservation Act. Third Draft. July.

\_\_\_\_\_. 2003a. Comprehensive Agreement between the U.S. Army Infantry Center. Fort Benning, GA and Signatory Tribes Regarding the Reinterment Site for Indian Burials.

\_\_\_\_\_. 2003b. Part 70 Operating Permit. No. 9711-215-0021-V-01-0. 16 June.

\_\_\_\_\_. 2001. Integrated Natural Resource Management Plan. Environmental Management Division. Fort Benning, GA.

Gawin, L., K. Lutz, D. Mikesic, and D. Stevenson. 1995. FS/HAAF Inventory Final Report. The Nature Conservancy, Ga. Field Office, Pembroke.

Georgia Department of Natural Resources (GDNR). 1999. Protected Animals of Georgia.

Georgia Department of Natural Resources. 1995. Protected Plants of Georgia.

Georgia Department of Natural Resources. 2006. Special Concern Animals List. Accessible at <http://georgiawildlife.dnr.state.ga.us/content/specialconcernanimals.asp>. Accessed 30 October. Georgia Forestry Commission, 1999. Georgia's Best Management Practices for Forestry.

Hall, L.S., P.R. Krausman, and M.L. Morrison. 1997. The habitat concept and a plea for standard terminology. *Wildlife Society Bulletin*. 25:171-182.

Hamilton, Dr. Christopher. 2011. Cultural Resources Program Manager, Chief of Environmental Programs Management Branch, Fort Benning, Georgia.

Hamilton, Dr. Christopher. 2010. Cultural Resources Program Manager, Chief of Environmental Programs Management Branch, Fort Benning, Georgia.

Interagency Floodplain Management Review Committee. 1994. *Sharing the Challenge: Floodplain Management into the 21<sup>st</sup> Century*. Report to the Administration Floodplain Management Task Force, Washington, D.C.

Kane & Keeton. Kane, S. and Keeton, R. 1998. The Land and the People. Southeast Archaeological Center. Tallahassee, FL. Fort Benning, GA. National Park Service.

Management Guidelines for the Red-cockaded Woodpecker on Army Installations, Headquarters, Department of the Army, Washington, DC, May 1996.

Marston, Timothy. 2010. Red-cockaded Woodpecker Wildlife Biologist, Fort Benning, Georgia.

National Park Service (NPS). 2002. How to Apply the National Register Criteria for Evaluation. National Register Publications Bulletin 15. U.S. Department of the Interior.

\_\_\_\_\_. 1998. Guidelines for Evaluating and Documentation Traditional Cultural Properties. National Register Publications Bulletin 38. U.S. Department of the Interior.

Neufeldt, Jonathan. 2011. Red-cockaded Woodpecker Wildlife Biologist, Fort Benning, Georgia.

Sassaman, K.E. 1983. Middle and Late Archaic Settlement in the South Carolina Piedmont. Unpublished M.A. thesis. Department of Anthropology. University of South Carolina, Columbia.

Saunders, J.W., Thurman, A., and Saucier R.T. 1994. Four Archaic Mound Complexes in Northeast LA. In *Southeastern Archaeology* 13(2):134-153.

Stats Indiana. 2007. Population Data by State and County. Accessed June 12, 2008. <[http://www.stats.indiana.edu/uspr/a/us\\_profile\\_frame.html](http://www.stats.indiana.edu/uspr/a/us_profile_frame.html)>.

US Army, 1996. The DPW/DEH Reference Book, Center for Public Works.

US Army Corps of Engineers (USACE) 2009. Final EIS. Maneuver Center of Excellence. Ft. Benning, GA.

USACE 2007. Final EIS for BRAC 2005 and Transformation Actions at Ft. Benning, GA. October.

USDI 1992. Classification of Wetlands and Deepwater Habitats of the United States. United States Department of the Interior.

USFWS, 1998. Threatened and Endangered Species of the Southeastern United States (the Red Book).

USFWS, 1993. Recovery Plan for Michaux's Sumac (*Rhus michauxii*). USFWS, Atlanta, GA. 30 pp.

Watts, W.A. 1971. Postglacial and Interglacial Vegetation History of Southern GA and Central FL. *Ecology*, Vol. 52:676-90.

Williams, Theodore. 2011. Environmental Protection Specialist – Hazardous Waste Program Manager, Fort Benning, Georgia.

## **7.0 ACRONYMS AND ABBREVIATIONS**

3 <sup>rd</sup> ID	3 <sup>rd</sup> Infantry Division
AAP	Army Alternative Procedures
ACHP	Advisory Council on Historical Preservation
AIRFA	American Indian Religious Freedom Act
APE	Area of Potential Effect
AR	Army Regulation
ARPA	Archaeological Resources Protection Act
BA	Biological Assessment
BMP	Best Management Practices
BO	Biological Opinion
BRAC	Base Realignment and Closure
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulation
CRM	Cultural Resource Management
CWA	Clean Water Act
DA	Department of the Army
dbh	Diameter Breast Height
DoDI	Department of Defense
DPW-EMD	Directorate of Public Works- Environmental Management Division
EA	Environmental Assessment
EIS	Environmental Impact Statement
EMCS	Energy Monitoring Control Systems
EMD	Environmental Management Division
EO	Executive Order
EPAct05	Energy Policy Act of 2005
EPM	Environmental Protection Measures
ESA	Endangered Species Act
ESMP	Endangered Species Management Plan
ESPCP	Erosion, Sedimentation, and Pollution Control Plan
FNSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
ft	foot/feet
GESA	Georgia Erosion & Sedimentation Control Act
GIS	Geographic Information Systems
HBCT	Heavy Brigade Combat Team
HPC	Historic Properties Component
HTMW	Hazardous, Toxic Materials and Waste
IDS	Intrusion Detection System
ICRMP	Integrated Cultural Resource Management Plan
INRMP	Integrated Natural Resources Management Plan
MBTA	Migratory Bird Treaty Act

MCoE	Maneuver Center of Excellence
MOU	Memorandum of Understanding
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
POV	Personally Owned Vehicle
RCW	Red-Cockaded Woodpecker
ROD	Record of Decision
ROI	Region of Influence
SDD	Sustainable Design and Development
SDZ	Surface Danger Zones
SOP	Standard Operating Procedures
TMDL	Total Maximum Daily Load
UAV	Unmanned Aerial Vehicle
USC	U.S. Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VEC	Valued Environmental Component
WMU	Watershed Management Units

---

## **8.0 DISTRIBUTION LIST**

**The following provides the distribution list for the NOA of the Final EA and Draft FNSI.**

### **I. MUNICIPAL AND COUNTY ELECTED AND APPOINTED OFFICIALS**

Mayor Teresa Tomlinson  
100 10th St. 6th Floor  
Government Center Tower  
Columbus, GA 31901

Mayor Sonny Coulter  
601 12th Street  
Phenix City, AL 36867

Commission Chairman  
Cusseta-Chattahoochee Co. Govt.  
P.O. Box 299  
Courthouse Annex  
Cusseta, GA

### **II. STATE, COUNTY, AND LOCAL GOVERNMENT OFFICIALS**

Governor Nathan Deal  
Office of the Governor  
203 Georgia State Capitol  
Atlanta, GA 30334

Rep. Sanford Bishop, Jr.  
Georgia – 2nd District  
2429 Rayburn HOB  
Washington, DC 20515-1002

Senator Saxby Chambliss  
416 Russell Senate Office Bldg.  
Washington, DC 20510

Senator Johnny Isakson  
120 Russell Senate Office Bldg.  
Washington, DC 20510

### **III. LOCAL AND REGIONAL ADMINISTRATORS, FEDERAL AGENCIES, OR COMMISSIONS WITH REGULATORY INTEREST IN FORT BENNING**

(\* = *provided CDs*)

\*U.S. Fish & Wildlife Service  
Attn: John Doresky  
P.O. Box 52560  
Fort Benning, GA 31995

Colonel Jeffrey M. Hall  
U.S. Army Corps of Engineers  
100 West Oglethorpe Avenue  
P.O. Box 889  
Savannah, GA 31402

Mr. Tom Fisher, Regulatory Branch  
USACE, Albany Field District  
1104 North Westover Road  
Albany, GA 31707

\*Ms. Barbara Jackson, Administrator  
Georgia State Clearinghouse  
270 Washington Street SW, 8<sup>th</sup> Floor  
Atlanta, GA 30334



GSWCC, Region 5  
4344 Albany Highway  
Dawson, GA 39842

Mr. Mark Williams, Commissioner  
Georgia Department of Natural Resources  
2 Martin Luther King Jr. Drive SE  
Atlanta, GA 30334

Mr. David C. Crass, Director  
Georgia DNR, Historic Preservation Division  
254 Washington Street SW  
Ground Level  
Atlanta, GA 30303

Environmental Protection Agency  
Region IV  
Atlanta Federal Center  
61 Forsyth Street SW  
Atlanta, GA 30303

Columbus Consolidated Government  
Planning Division  
10<sup>th</sup> Street; 6<sup>th</sup> Floor  
Government Center Tower  
Columbus, GA 31901

Mr. Willie Taylor, Director  
USDI, Office of Environmental Policy and Compliance  
1849 C Street NW (MS 2462)  
Washington, DC 20240

USDI, Office of Environmental Policy and Compliance  
75 Spring Street SW  
Russell Federal Building; Suite 114  
Atlanta, GA 30303

#### **IV. CITIZEN ADVISORY GROUPS AND LOCAL INTEREST GROUPS OR PERSONS**

Sierra Club, Georgia Chapter  
1447 Peachtree Street N.E.  
Suite 305  
Atlanta, GA 30309

National Wildlife Society  
1401 Peachtree Street N.E.  
Suite 240  
Atlanta, GA 30309

Wade Harrison, Project Director  
The Nature Conservancy  
Chattahoochee Fall Line Office  
P.O. Box 52452  
Columbus, GA 31905

USDA Forest Service  
Southern Region  
1720 Peachtree Road NW  
Atlanta, GA 30309

Defenders of Wildlife National Headquarters  
Attn: Laura Turner Seydel  
1130 17<sup>th</sup> Street NW  
Washington, DC 20036

Georgia DNR  
Georgia Wildlife Resources Division  
2070 U.S. Hwy. 278, SE  
Social Circle, GA 30025

Southern Environmental Law Center  
The Candler Building  
127 Peachtree St., Suite 605  
Atlanta, GA 30303-1840

Mr. Frank W. White, Executive Director  
Alabama State Historic Preservation Officer  
Alabama Historic Commission  
468 South Perry Street  
Montgomery, AL 36130

## **V. FORT BENNING AND OTHER ARMY OFFICIALS**

Major General Robert B. Brown  
Commanding General  
Building 35  
Fort Benning, GA 31905

Director, Installation Management Command  
Southeast Region  
1593 Hardee Avenue  
Fort McPherson, GA 30330

Installation Management Command  
Northeast Region Office  
5A North Gate Road  
IMNE-ZA  
Fort Monroe, Virginia 23651-1048

NEPA Manager  
HQ FORSCOM (AFEN-ENE)  
1777 Hardee Avenue NW  
Fort McPherson, GA 30330

Office of the Staff Judge Advocate  
7021 Ingersoll Street  
Bldg. 359  
Fort Benning, Georgia 31905

Commander, Maneuver Center of Excellence  
Directorate of Operations and Training  
Building 35  
Fort Benning, Georgia 31905

Garrison Commander  
ATTN: IMSE-BEN-ZA  
6751 Constitution Loop  
Suite 550  
Fort Benning, Georgia 31905

Deputy Garrison Commander  
ATTN: IMSE-BEN-ZA  
6751 Constitution Loop  
Suite 550  
Fort Benning, Georgia 31905

## **V. NATIVE AMERICAN TRIBAL REPRESENTATIVES (All Provided CDs)**

Mr. Bryant Celestine  
Historic Preservation Officer  
Alabama-Coushatta Tribe of Texas  
571 State Park Road 56  
Livingston, Texas 77351

Mr. Henry Harjo  
Representative  
Kialegee Tribal Town  
P.O. Box 332  
Wetumka, Oklahoma 74883

Ms. Augustine Asbury  
Cultural Preservation Officer  
Honorable Second Chief  
Alabama/Quassarte Tribe of OK  
P.O. Box 187  
Wetumka, Oklahoma 74480

Mr. Robert Thrower  
Tribal Historic Preservation Officer  
5811 Jack Springs Road  
Atmore, Alabama 36502

Ms. Gingy Nail  
Director of Cultural Resources  
Chickasaw Nation  
P.O. Box 1548  
Ada, Oklahoma 74820-1548

Ms. Natalie Deere  
Historic Preservation Officer  
Seminole Nation of Oklahoma  
P.O. Box 1498  
Wewoka, Oklahoma 74884

Mr. Ken Carlton  
Tribal Historic Preservation Officer  
Mississippi Choctaw Indians  
P.O. Box 6010  
Choctaw, Mississippi 39350

Mr. Willard Steele  
Deputy Tribal Hist. Preservation Officer  
Seminole Tribe of Florida  
AH-THA-THI-KI Museum  
HC 61, Box 21A  
Clewiston, Florida 33440

Mr. Ted Isham, Manager  
Cultural Preservation Office  
Muscogee (Creek) Nation of Oklahoma  
P.O. Box 580  
Okmulgee, Oklahoma 74447

Mr. Charles Coleman  
Representative  
Thlopothloco Tribal Town  
P.O. Box 188  
Okemah, Oklahoma 74859

Ms. Lisa LaRue  
Representative  
United Keetoowah Band of the Cherokee Indians of Oklahoma  
P.O. Box 746  
Tahlequah, Oklahoma 74456

## **VI. LOCAL NEWS, MEDIA, AND LIBRARIES (\* = provided hardcopies)**

Columbus Ledger-Enquirer  
P.O. Box 830  
Columbus, GA 31902

The Bayonet  
Attn: Public Affairs Office  
35 Ridgway Loop; Suite 381  
Fort Benning, GA 31905

\*Sayers Memorial Library (Fort Benning Main Post Library)  
Building 93  
Fort Benning, GA 31905

\*South Columbus Branch Library  
2034 South Lumpkin Road  
Columbus, GA 31903

\*Columbus Public Library  
3000 Macon Road  
Columbus, GA 31906

## APPENDIX A

### NOTICE OF AVAILABILITY

**NOTICE OF AVAILABILITY  
FINAL ENVIRONMENTAL ASSESSEMENT AND  
DRAFT FINDING OF NO SIGNIFICANT IMPACT**

**3<sup>RD</sup> INFANTRY DIVISION (3ID)  
HEAVY BRIGADE COMBAT TEAM (HBCT) COMPLEX  
AND  
UPGRADE TO TANK TRAIL  
  
FORT BENNING, GEORGIA**

The United States Army Maneuver Center of Excellence, Directorate of Public Works, Fort Benning, Georgia, hereby announces the availability of the "Final Environmental Assessment (EA) and Draft Finding of No Significant Impact (FNSI) for the Proposed Implementation of the 3<sup>rd</sup> Infantry Division (3ID) Heavy Brigade Combat Team (HBCT) Complex and Upgrade to Tank Trail at Fort Benning, Georgia." These documents address the proposal to construct, operate, and maintain an Army standard design HBCT Complex to include a tactical vehicle maintenance facility, and upgrades and repairs to existing tank trail infrastructure. This Proposed Action would improve training and other military operations, notably in concert with the establishment of the Maneuver Center of Excellence (MCoE).

The Final EA and Draft FNSI have been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA; 42 USC 4321 *et seq.*), the Council on Environmental Quality (CEQ) Regulations Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508), and the Army NEPA Regulation (*Environmental Analysis of Army Actions*, Final Rule, 32 CFR Part 651). Publication of this notice begins a 30-day public review period. The public is invited to review and comment on the Final EA and Draft FNSI from **July 13 – August 12, 2011**. Copies of the Final EA and Draft FNSI may be viewed at the following locations:

1. Columbus Public Library
2. South Columbus Branch Library
3. Sayers Memorial Library (Fort Benning Main Post Library)

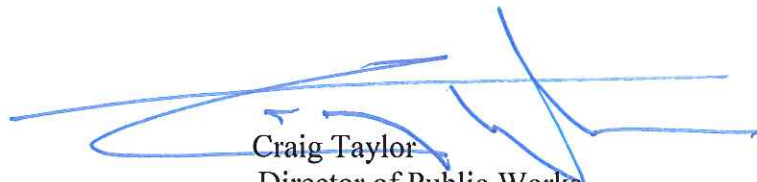
In addition, the Final EA and Draft FNSI are also posted on Fort Benning's website at <http://www.benning.army.mil/garrison/DPW/EMD/legal.htm>. Written comments concerning this Final EA and Draft FNSI are invited; the comments must be received by **August 12, 2011** to ensure consideration prior to reaching any FNSI.

Written public comments should be addressed to:

- **Mr. John Brent**; Environmental Management Division Chief; IMSE-BEN-PWE-P; 6650 Meloy Drive; Building 6, Room 307; Fort Benning, Georgia 31905; or via e-mail at [john.brent@us.army.mil](mailto:john.brent@us.army.mil).

For further information or to request a copy of the documents, please contact the U.S Army Maneuver Center of Excellence, Directorate of Public Works, Environmental Programs Management Branch (Attention: **Mr. John E. Brown**, NEPA Program Manager), 6650 Meloy Drive; Building 6 (Meloy Hall), Room 309; Fort Benning, Georgia 31905-5122 or call (706) 545-7549.

Sincerely,



Craig Taylor  
Director of Public Works  
Fort Benning, Georgia

## APPENDIX B

### PUBLIC COMMENTS



**GEORGIA STATE CLEARINGHOUSE MEMORANDUM  
EXECUTIVE ORDER 12372 REVIEW PROCESS**

TO: John Brent  
Environmental Mgt. Div., IMSE-BEN-PWE-P  
Dept. of the Army

FROM: Barbara Jackson

DATE: 7/15/2011

APPLICANT: Dept. of the Army - Fort Benning, GA

PROJECT: Final EA/Draft FONSI: 3rd Infantry Division (3ID) Heavy Brigade  
Combat Team (HBCT) Complex and Upgrade to Tank Trail (Fort  
Benning, GA)

CFDA #:

STATE ID: GA110715002

FEDERAL ID:

Material related to the above project was received by the Georgia State Clearinghouse on 7/15/2011. The review has been initiated and every effort is being made to ensure prompt action. The project will be reviewed for its consistency with goals, policies, plans, objectives, programs, environmental impact, criteria for Developments of Regional Impact (DRI) or inconsistencies with federal executive orders, acts and/or rules and regulations, and if applicable, with budgetary restraints.

The initial review process should be completed by 8/12/2011 (*approximately*). If the Clearinghouse has not contacted you by that date, please call (404) 656-3855, and we will check into the delay. We appreciate your cooperation on this matter.

When emailing or calling about this project, please reference the State Application Identifier number shown above. If you have any questions regarding this project, please contact us at the above number.

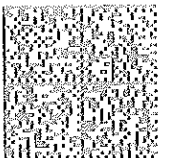
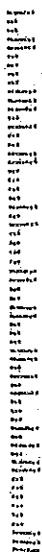


*Office of Planning & Budget*  
*270 Washington St., 8th Floor*  
*Atlanta, Georgia 30334*

John Brent  
Environmental Mgt. Div., IMSE-BEN-PWE-P  
Dept. of the Army  
6650 Meloy Drive, Bldg. 6, Room 307  
Fort Benning, GA 31905-5122

319055122 0077

*Clearinghouse Correspondence*



UNITED STATES POSTAGE  
02 1P  
0003167152 JUL 15 2011  
\$000.440  
PITNEY BOWES  
MAILED FROM ZIP CODE 30334



STATE OF ALABAMA  
ALABAMA HISTORICAL COMMISSION  
468 SOUTH PERRY STREET  
MONTGOMERY, ALABAMA 36130-0900

FRANK W. WHITE  
EXECUTIVE DIRECTOR

TEL: 334-242-3184  
FAX: 334-240-3477

July 27, 2011

Craig Taylor  
Director of Public Works  
35 Ridgway Loop  
Fort Benning, Georgia 31905-4500

Re: 11-0876  
Final EIS  
Heavy Brigade Complex and Tank Trail  
Fort Benning  
Russell County, Alabama

Dear Mr. Taylor:

Thank you for forwarding the information regarding the Final Environmental Impact Statement for this project. From earlier consultation, it is our understanding that the proposed action takes place entirely within the State of Georgia. Please advise us if this remains true.

We appreciate your efforts on this project. Should you have any questions, please contact Greg Rhinehart at (334) 230-2662. Please have the AHC tracking number referenced above available and include it with any correspondence.

Truly yours,

Elizabeth Ann Brown  
Deputy State Historic Preservation Officer

EAB/GCR/gcr

# SEMINOLE TRIBE OF FLORIDA TRIBAL HISTORIC PRESERVATION OFFICE

TRIBAL HISTORIC  
PRESERVATION OFFICE  
SEMINOLE TRIBE OF FLORIDA  
AH-TAH-THI-KI MUSEUM  
30290 JOSIE BILLIE HWY  
PMB 1004  
CLEWISTON, FL 33440  
PHONE: (863) 983-6549  
FAX: (863) 902-1117



TRIBAL OFFICERS  
CHAIRMAN  
JAMES E. BILLIE  
VICE CHAIRMAN  
TONY SANCHEZ, JR.  
SECRETARY  
PRISCILLA D. SAYEN  
TREASURER  
MICHAEL D. TIGER

Directorate of Public Works  
Attn: IMSE-BEM-PWE-P/Mr. John Brent  
6650 Meloy Drive, Building 6  
Room 307  
Fort Benning, GA 31905-5122

THPO#: 008614

August 4, 2011

**Subject:** Final Environmental Assessment (EA) and Draft Findings of No Significant Impact (FNSI) for the Proposed Implementation of the 3<sup>rd</sup> Infantry Division (3ID) Heavy Brigade Combat Team (HBCT) Complex and Upgrade to Tank Trail at Fort Benning, GA

Dear Mr. Brent:

The Seminole Tribe of Florida's Tribal Historic Preservation Office (STOF-THPO) has received the Department of the Army, Fort Benning correspondence concerning the aforementioned project. The STOF-THPO has no objection to your findings at this time. However, the STOF-THPO would like to be informed if cultural resources that are potentially ancestral or historically relevant to the Seminole Tribe of Florida are inadvertently discovered during the construction process. We thank you for the opportunity to review the information that has been sent to date regarding this project. Please reference **THPO-008614** for any related issues.

We look forward to working with you in the future.

Sincerely,

Willard Steele  
Tribal Historic Preservation Officer  
Seminole Tribe of Florida

**Direct routine inquiries to:**

Anne Mullins  
Compliance Review Supervisor  
annemullins@semtribe.com

AM



## OFFICE OF PLANNING AND BUDGET

Nathan Deal  
Governor

Debbie Dlugolenski Alford  
Director

### GEORGIA STATE CLEARINGHOUSE MEMORANDUM EXECUTIVE ORDER 12372 REVIEW PROCESS

TO: John Brent  
Environmental Mgt. Div., IMSE-BEN-PWE-P  
Dept. of the Army

FROM: Barbara Jackson *BJ*  
Georgia State Clearinghouse

DATE: 8/5/2011

APPLICANT: Dept. of the Army - Fort Benning, GA

PROJECT: Final EA/Draft FONSI: 3rd Infantry Division (3ID) Heavy Brigade Combat Team (HBCT) Complex and Upgrade to Tank Trail (Fort Benning, GA)

STATE ID: GA110715002

The applicant/sponsor indicated that a copy of this project was directly submitted to DNR's Wildlife Resources Division, one of our state reviewers for this type project.

/bj

Enc.: DNR/EPD, Aug. 5, 2011  
GFC, July 22, 2011


Form NCC  
Oct. 2008

AN EQUAL OPPORTUNITY EMPLOYER

D Remote ID: R page of

GEORGIA STATE CLEARINGHOUSE MEMORANDUM  
EXECUTIVE ORDER 12372 REVIEW PROCESS

TO: Barbara Jackson  
Georgia State Clearinghouse  
270 Washington Street, SW, Eighth Floor  
Atlanta, Georgia 30334

FROM: MR. F. ALLEN BARNES   
GA DNR-EPD DIRECTOR'S OFFICE

APPLICANT: Dept. of the Army - Fort Benning, GA

PROJECT: Final EA/Draft FONSI: 3rd Infantry Division (3ID) Heavy Brigade Combat Team (HBCT) Complex and Upgrade to Tank Trail (Fort Benning, GA)

STATE ID: GA110715002

FEDERAL ID:

DATE:

☒ This project is considered to be consistent with those state or regional goals, policies, plans, fiscal resources, criteria for developments of regional impact, environmental impacts, federal executive orders, acts and/or rules and regulations with which this organization is concerned.

This project is not consistent with:

- ☐ The goals, plans, policies, or fiscal resources with which this organization is concerned. (Line through inappropriate word or words and prepare a statement that explains the rationale for the inconsistency. (Additional pages may be used for outlining the inconsistencies. Be sure to put the GA State ID number on all pages).
- ☐ The criteria for developments of regional impact, federal executive orders, acts and/or rules and regulations administered by your agency. Negative environmental impacts or provision for protection of the environment should be pointed out. (Additional pages may be used for outlining the inconsistencies. Be sure to put the GA State ID number on all pages).

☐ This project does not impact upon the activities of the organization.

**NOTE:** Should you decide to FAX this form (and any attached pages), it is not necessary to mail the originals to us. [770-344-3568]

RECEIVED

AUG 05 2011

GEORGIA  
STATE CLEARINGHOUSE

Form SC-3  
Aug. 2010

D Remote ID: R page of

**GEORGIA STATE CLEARINGHOUSE MEMORANDUM  
EXECUTIVE ORDER 12372 REVIEW PROCESS**

TO: Barbara Jackson  
Georgia State Clearinghouse  
270 Washington Street, SW, Eighth Floor  
Atlanta, Georgia 30334

FROM: MR. DAN GARY   
GEORGIA FORESTRY COMMISSION

APPLICANT: Dept. of the Army - Fort Benning, GA

PROJECT: Final EA/Draft FONSI: 3rd Infantry Division (3ID) Heavy Brigade Combat  
Team (HBCT) Complex and Upgrade to Tank Trail (Fort Benning, GA)

STATE ID: GA110715002

FEDERAL ID:

DATE: 7/22/11

- ☒ This project is considered to be consistent with those state or regional goals, policies, plans, fiscal resources, criteria for developments of regional impact, environmental impacts, federal executive orders, acts and/or rules and regulations with which this organization is concerned.

This project is not consistent with:

- ☐ The goals, plans, policies, or fiscal resources with which this organization is concerned. (Line through inappropriate word or words and prepare a statement that explains the rationale for the inconsistency. (Additional pages may be used for outlining the inconsistencies. Be sure to put the GA State ID number on all pages).
- ☐ The criteria for developments of regional impact, federal executive orders, acts and/or rules and regulations administered by your agency. Negative environmental impacts or provision for protection of the environment should be pointed out. (Additional pages may be used for outlining the inconsistencies. Be sure to put the GA State ID number on all pages).
- ☐ This project does not impact upon the activities of the organization.

**NOTE: Should you decide to FAX  
this form (and any attached pages),  
it is not necessary to mail the  
originals to us. [770-344-3568]**

**RECEIVED**

**JUL 23 2011**

**GEORGIA  
STATE CLEARINGHOUSE**

Form SC-3  
Aug. 2010

TOTAL P.01



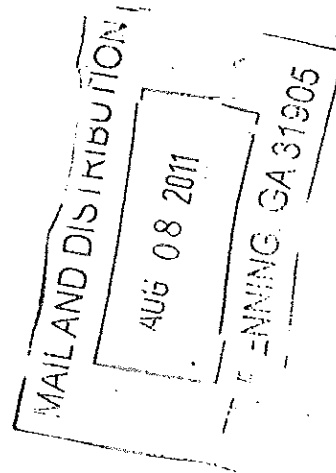
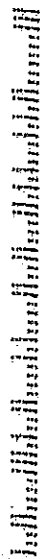
*Office of Planning & Budget*  
270 Washington St., 8<sup>th</sup> Floor  
Atlanta, Georgia 30334



John Brent  
Environmental Mgt. Div., IMSE-BEN-PWE-P  
Dept. of the Army  
6650 Meloy Drive, Bldg. 6, Room 307  
Fort Benning, GA 31905-5122

*Clearinghouse Correspondence*

31905-5122





## APPENDIX C

### BUILDING DEMOLITION LIST

**Facility Demolition List for the 3ID HBCT Complex**

<b><u>Facility Number</u></b>	<b><u>Year Constructed</u></b>	<b><u>Function/Purpose</u></b>	<b><u>NHRP Eligibility</u></b>
9030	1957	DISPATCH BLDG	N/E - CW
9031	1957	FUEL/POL BLDG	N/E - CW
9032	1956	VEH MAINT SHOP	N/E - CW
9033	1956	VEH MAINT SHOP	N/E - CW
9034	1957	VEH MAINT SHOP	N/E - CW
9035	1957	VEH MAINT SHOP	N/E - CW
9037	1957	OIL STR BLDG	N/E - CW
9038	1959	OIL STR BLDG	N/E - CW
9042	1964	DISPATCH BLDG	N/E - CW
9081	1961	DISPATCH BLDG	N/E - CW
9083	1961	VEH MAINT SHOP	N/E - CW
9084	1961	VEH MAINT SHOP	N/E - CW
9085	1961	VEH MAINT SHOP	N/E - CW
9086	1961	VEH MAINT SHOP	N/E - CW
9087	1988	VEH MAINT SHOP	N/E - CW
9088	1961	OIL HOUSE	N/E - CW
9089	1961	OIL HOUSE	N/E - CW
9091	1988	DEPLOY STR BLDG	N/E - CW
9092	1988	OIL STR BLDG	N/E - CW
9093	1988	FUEL STATION BLDG	N/E - CW
M9313	1957	Grease Rack	NA
M9314	1957	Grease Rack	NA
M9315	1961	Grease Rack	NA
M9316	1957	Grease Rack	NA
M9515	Unknown*	20,000 Gallon UST	NA
M9579	Unknown*	20,000 Gallon UST	NA
M9580	Unknown*	20,000 Gallon UST	NA
M9581	Unknown*	20,000 Gallon UST	NA
M9582	Unknown*	Oil/Water Separator	NA

\* Construction dates not in Fort Benning Real property records. Facilities and structures were found during inventory inspections in 2009.

N/E – CW – Not NRHP eligible. Cold War Era buildings.

NA – NRHP eligibility not applicable.