
CAMP DAWSON COLLECTIVE TRAINING CENTER ENVIRONMENTAL ASSESSMENT

FOR

**RANGE DEVELOPMENT
BRIERY MOUNTAIN TRAINING AREA
PRESTON COUNTY, WEST VIRGINIA**



WEST VIRGINIA ARMY NATIONAL GUARD

NOVEMBER 2014

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ENVIRONMENTAL ASSESSMENT ORGANIZATION

This Environmental Assessment (EA) evaluates the potential environmental, socioeconomic, and cultural effects of the proposed construction and operation of three ranges (Live Fire Breach Facility, a Hand Grenade Familiarization Range, and an MK 19 Range) at the Briery Mountain Training Area (BMTA) by the West Virginia Army National Guard (WVARNG).

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] 1500-1508), and 32 CFR Part 651 (Environmental Analysis of Army Actions, Final Rule), the potential effects of the Proposed Action and Alternatives are analyzed. This EA will facilitate the decision process regarding the Proposed Action and its alternatives, and is organized as follows:

EXECUTIVE SUMMARY: Describes the Proposed Action and its considered alternatives; summarizes environmental, cultural, and socioeconomic consequences; and compares potential effects associated with the considered alternatives, including the No Action Alternative.

SECTION 1.0 PURPOSE, NEED, AND SCOPE: Summarizes the purpose of and need for the Proposed Action, provides relevant background information, and describes the scope of the EA.

SECTION 2.0 DESCRIPTION OF THE PROPOSED ACTION: Describes the Proposed Action. Presents alternatives for implementing the Proposed Action, including applied screening criteria, alternatives retained for further analysis, and alternatives eliminated, as well as a brief explanation of the rationale for eliminating certain alternatives.

SECTION 3.0 ALTERNATIVES CONSIDERED: Describes relevant components of the existing environmental, cultural, and socioeconomic setting (within the Region of Influence [ROI]) of the considered alternatives.

SECTION 4.0 ENVIRONMENTAL CONSEQUENCES: Identifies individual and cumulative potential environmental, cultural, and socioeconomic effects of implementing the Proposed Action and alternatives, and identifies proposed mitigation measures.

SECTION 5.0 COMPARISON OF ALTERNATIVES AND CONCLUSIONS: Compares the environmental effects of the considered alternatives and summarizes the significance of individual and expected cumulative effects of these alternatives.

SECTION 6.0 REFERENCES: Provides bibliographical information for cited sources.

SECTION 7.0 LIST OF PREPARERS: Identifies document preparers and their areas of expertise.

SECTION 8.0 AGENCIES AND INDIVIDUALS CONSULTED: Lists agencies and individuals consulted during this EA.

✓ **Funding Source:** Minor Construction

✓ **Proponent:** West Virginia Army National Guard

✓ **Fiscal Year (FY):** Hand Grenade Familiarization Range = Project Number 540211 in FY15; MK 19 Non Standard Range = Project Number CD-13-16 in FY15; Live Fire Breach Facility = Project Number 540210 in FY18.

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ENVIRONMENTAL ASSESSMENT SIGNATURE PAGE

LEAD AGENCY: National Guard Bureau (NGB)

COOPERATING AGENCIES: None

TITLE OF PROPOSED ACTION: Proposed Range Development at the Briery Mountain Training Area (BMTA), Preston County, West Virginia

AFFECTED JURISDICTION: Preston County, West Virginia

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DOCUMENT DESIGNATION: Final Environmental Assessment

ABSTRACT: The NGB and WVARNG propose to develop three ranges within the BMTA at the Camp Dawson Collective Training Center (CDCTC). These projects, comprising the Proposed Action, include the construction and operation of a Live Fire Breach Facility (LFBF), a Hand Grenade Familiarization Range (HGFR), and an MK 19 Range. The Proposed Action is needed to ensure the WVARNG provides complete training facilities for its units, ensure attainment and maintenance of a full readiness posture, and meet mission training objectives with sufficient land area as defined in Training Circular (TC) 25-1. The Proposed Action would ensure the continued and long-term viability of the CDCTC as a training center capable of providing the land and resources necessary to support the WVARNG's and other military users' assigned training missions. This Environmental Assessment (EA) evaluates the individual and cumulative effects of the Preferred Action (Build Alternative – Range Configuration B), Build Alternative – Range Configuration A, and the No Action Alternative with respect to the following criteria: geographic setting and land use, air quality, noise, geology, soils, topography, water resources, biological resources, cultural resources, socioeconomic environment, infrastructure and hazardous and toxic materials/wastes. The evaluation performed in this EA concludes that there would be no significant adverse impact, either individually or cumulatively, to the local environment or quality of life associated with the implementation of the Proposed Action, provided routine best management practices are implemented. As such, the EA recommends implementation of the Preferred Action Alternative.

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EXECUTIVE SUMMARY

Proposed Range Development at the Briery Mountain Training Area, Preston County, West Virginia

This Environmental Assessment (EA) has been prepared to identify, document, and discuss the possible environmental, cultural, and socioeconomic impacts associated with the proposed construction and operation of three ranges within the Briery Mountain Training Area (BMTA) at the Camp Dawson Collective Training Center (CDCTC) in Preston County, West Virginia. This EA provides the necessary information to properly and fully assess the potential effects of proposed range development as required under the National Environmental Policy Act (NEPA) of 1969, as amended (42 US Code [USC] 4321 *et seq.*); the President's Council of Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] 1500-1508); and 32 CFR Part 651.

OVERVIEW OF PROJECT PURPOSE AND NEED

The WVARNG's Proposed Action is to develop three proposed BMTA range projects. The Live Fire Breach Facility (LFBF) and the Hand Grenade Familiarization Range (HGFR) are identified in the 2013 Range Complex Master Plan (RCMP) to meet the WVARNG's training requirements. An MK 19 range is the third proposed project. Component projects are listed in **Table ES-1**, below.

Table ES-1. Proposed Range Development Plan Projects at the BMTA
Range
Live Fire Breach Facility (LFBF)
Hand Grenade Familiarization Range (HGFR)
MK 19 Range

The purpose of the Proposed Action is to provide the requisite training facilities at the BMTA for in-state training for WVARNG units to conduct breaching techniques (the LFBF), employment of live fragmentation hand grenades (the HGFR) and gunnery exercises for the MK 19. The WVARNG currently conducts this type of training at installations where space is available, primarily in the states of Kentucky and Pennsylvania.

The Proposed Action is needed to ensure the WVARNG provides complete training facilities for its units to ensure attainment and maintenance of a full readiness posture, and to meet mission training objectives with sufficient land area as defined in Training Circular (TC) 25-1. The Proposed Action is also needed to ensure the continued and long-term viability of the CDCTC as a training center capable of providing the land and resources necessary to support the WVARNG's and other military users' assigned training missions. Implementation of the Proposed Action would support higher quality, mission-essential, and increased training

activities at CDCTC, while limiting the need for out-of-state travel. The WVARNG estimates that site utilization could increase by approximately 53 range days per year (all users).

Overview of Considered Project Alternatives

This EA evaluates the individual and cumulative effects associated with the proposed construction and operation of ranges at the BMTA with respect to the following criteria: geographic setting and land use and cover; air quality; noise; topography, geology, and soils; water resources, biological resources, cultural resources, socioeconomics; environmental justice; infrastructure; and hazardous and toxic materials/wastes. This EA examines in-depth three alternatives, the Preferred Action Alternative, the Build Alternative and the No Action Alternative, defined as follows.

- **Preferred Action Alternative (Alternative B)** – The three proposed range projects identified in **Section 2.0** would be implemented as described. This is the WVARNG's Preferred Action Alternative because it effectively provides the best combination of land and resources to sustain quality military training and maintain and improve the units' readiness postures. Under the Preferred Action Alternative, the MK 19 range and the HGFR would be southwest of the LFBF within the southern portion of the BMTA. The Preferred Action Alternative would require a total of approximately 20.82 acres of land for the construction of the MK 19 range (18.01 acres), HGFR (2.41 acres), and the LFBF (0.4 acres). Additional acres of BMTA land would be designated as the ranges' surface danger zone (SDZ) during range operation. The MK 19 Range would require 323.62 acres of land for the SDZ, the HGFR would require 31.59 acres of land and the LFBF would require 152.3 acres. No grading would occur within the SDZ. WVARNG determined that Alternative B is the preferred alternative because Alternative B LFBF's SDZ has more of an overlap with the existing MRFR's SDZ and slightly more of an overlap with the MK 19 range's SDZ and therefore, Alternative B would require less land for operation. By moving the LFBF farther away from the MK 19 range, Alternative B reduces potential conflicts between these two ranges and would allow operation of both ranges simultaneously. Existing logging trails will be utilized for access. Alternative B would allow better usage of the existing trail for access.
- **Build Alternative (Alternative A)** – The three proposed range projects identified in **Section 2.0** would be implemented as described. This alternative would still provide the land and resources necessary to sustain quality military training and maintain and improve the units' readiness postures. Under Alternative A, the MK 19 range would be in the same location but the locations of the HGFR the LFBF would be reversed. The LFBF would be located southwest of the HGFR within the southern portion of the BMTA. The same amount of acreage would be needed for construction of Alternative A as Alternative B. However, Alternative A has less of an overlap with the existing BMTA SDZ.
- **No Action Alternative** – The Proposed Action would not be implemented. Current installation operations would continue. This alternative would limit the capability of the WVARNG to carry out its assigned mission to provide adequate training facilities, and would not meet the purpose of or need for the Proposed Action. This alternative was retained to provide a comparative baseline analysis as required under Federal law. Required training would continue to be conducted by the WVARNG at installations where space is available, primarily in the states of Kentucky and Pennsylvania. This would continue to cause WVARNG units to risk not meeting Standards in Training

Commission (STRAC) requirements, and to use excessive training time for travel, potentially resulting in an inability to meet training proficiency standards.

Environmental Consequences

- Each Proposed Action component was evaluated to determine its potential direct or indirect impact(s) on the physical, environmental, cultural, and socioeconomic aspects of Buckhannon and surrounding area. Technical areas evaluated include:
 - *Land Use*
 - *Air Quality*
 - *Noise*
 - *Geology, Topography, and Soils*
 - *Water Resources*
 - *Biological Resources*
 - *Cultural Resources*
 - *Socioeconomics*
 - *Environmental Justice*
 - *Infrastructure*
 - *Hazardous and Toxic Materials and Wastes*

The Preferred Action Alternative would result in the impacts identified throughout **Section 4.0**. These include potential adverse impacts to light pollution, air quality, local noise environment, water quality, biological resources, and hazardous and toxic materials and waste. As summarized in the **Table** below, the Preferred Action Alternative would result in generally minor impacts to the local region and population. Under the Preferred Action Alternative, positive long-term impacts to the local land use, local socioeconomic environment, environmental justice, and installation infrastructure would be anticipated. Positive short-term impacts to area socioeconomic and environmental justice concerns would be anticipated. Generally, the Preferred Action Alternative would not noticeably contribute to an ongoing on-site or regional decline in natural or cultural resources. The Preferred Alternative would enhance the local socioeconomic environment through ensuring the long-term viability of the Buckhannon Readiness Center, FMS, and USPFO.

Summary of Impacts

Technical Resource Area	No Action Alternative	Preferred Action Alternative
Geographic Setting and Location	No impact attributable to WVARNG action.	Less-than-significant adverse impact through the removal of vegetative cover within the footprint of the LFBF, HGFR, and MK 19 range and minor alteration of the site's topographic during construction. No change anticipated in the SDZs.
Land Use	No impact attributable to WVARNG action.	Short- and long-term positive impact through the development

Technical Resource Area	No Action Alternative	Preferred Action Alternative
		of the site.
Air Quality	No impact attributable to WVARNG action. Ongoing operations' emissions would continue at current location.	Short-term, less-than-significant adverse impacts due to the potential for dust generation from construction activities. Would be reduced by the implementation of BMPs. Long-term, less-than-significant adverse impacts by increasing site emissions from facility operations/activities and WVARNG traffic.
Noise	No impact attributable to WVARNG action. Ongoing operations' noise impacts would continue at current location.	Minor short- and long-term, less-than-significant adverse impacts from construction and operation of the facilities.
Geology, Topography, and Soils	No impact attributable to WVARNG action.	Short-term, less-than-significant adverse impact to soils during construction through grading. Impacts would be reduced with implementation of BMPs.
Water Resources	No impact attributable to WVARNG action.	Short-term, less-than-significant adverse impacts to surface waters due to soil erosion and consequent sedimentation during construction. Impacts would be reduced with implementation of BMPs.
Biological Resources	No impact attributable to WVARNG action.	Short- and long-term, less-than-significant adverse impacts to biological resources through habitat conversion. Impacts would be reduced with implementation of BMPs.
Cultural Resources	No direct impact attributable to WVARNG action.	No direct impact anticipated from range construction as no cultural resources within range footprint.
Socioeconomics	No impact attributable to WVARNG action.	Short- and long-term positive impact.

Technical Resource Area	No Action Alternative	Preferred Action Alternative
Recreation	No impact attributable to WVARNG action.	Short- and long-term, less-than-significant adverse impacts due to reduced recreational activity during range use.
Utilities	No impact attributable to WVARNG action.	No impact anticipated.
Infrastructure	No impact attributable to WVARNG action.	Short- and long-term, less-than-significant adverse impacts due to construction and increased operational traffic. Would be reduced with implementation of BMPs.
Hazardous and Toxic Materials/Wastes (HTMW)	No impact attributable to WVARNG action. Existing HTMW management plans would continue to be implemented.	Short- and long-term, less-than-significant adverse impacts due to construction activities and HTMW use/generation from operation activities. Would be controlled through ongoing regulatory compliance and BMPs.
Cumulative Impact	No impact attributable to WVARNG action.	Long-term, less-than-significant adverse impacts.

BEST MANAGEMENT PRACTICES

Per established protocols, procedures, and requirements, the WVARNG will implement best management practices (BMPs) and will satisfy all applicable Regulatory Requirements in association with design, construction, and operation of the Preferred Action Alternative component projects. These “management measures” are described in this EA, and are included as components of the Preferred Action Alternative. “Management measures” are defined as routine BMPs and/or regulatory compliance measures the WVARNG regularly implements as part of their activities, as appropriate, across the State of West Virginia. These are different from “mitigation measures,” which are defined as project-specific requirements, not routinely implemented by the WVARNG, necessary to reduce identified potentially significant adverse environmental impacts to less-than-significant levels. With implementation of the following routine “management measures” and project-specific mitigation measures, the Preferred Action Alternative would not result in significant adverse impacts to the current environmental setting.

To maintain their stewardship posture, the WVARNG will implement the following BMPs, as appropriate, for this Proposed Action:

Air Quality

- Reduce or eliminate fugitive dust emissions and minimize impacts to air quality by watering disturbed areas and unpaved roads, limiting vehicle speeds on unpaved areas, covering haul trucks with tarps, and stabilizing previously disturbed areas if they will be inactive for several weeks or more.

Noise

- Reduce noise impacts during construction by limiting construction and associated heavy truck traffic between nine p.m. to seven a.m. This measure would reduce noise impacts during sensitive night-time hours.
- Locate stationary equipment as far away from sensitive receivers as possible.
- Select material transportation routes as far away from sensitive receivers as possible.
- Shut down noise-generating heavy equipment when it is not needed.
- Maintain equipment per manufacturer's recommendations.

Erosion

- Prepare a detailed, site-specific Erosion and Sedimentation (E&S) Control Plan to address all earth-disturbance aspects of the Proposed Action. The E&S Control Plan would include BMPs, such as specific guidelines and engineering controls, to mitigate anticipated erosion and resultant sedimentation impacts from establishment and operation of the proposed facilities.
- Install and monitor erosion-prevention measures such as silt fences, sedimentation basins, straw bales, and/or other sediment control structures; re-spreading stockpiled topsoil; and seeding/revegetation of areas temporarily cleared of vegetation.
- Retain forest vegetation and riparian vegetation to the maximum extent possible.
- Use native vegetation to revegetate disturbed soils.

Migratory Birds

Reduce avian risk, to the extent practicable, by conducting land disturbing activities either before or after nesting season (spring)

Cultural Resources

- In case of inadvertent discovery of cultural items or tribal resources, the WVARNG would follow SOP 5 of the WVARNG ICRMP.
- WVARNG will check on site 46PR90 annually to determine if training exercises are having any effect on the rock shelter and will report to WVSHPO if damage is occurring.

- In the event that human remains were discovered, all work in the area would stop and the Preston County Coroner would be notified immediately. If the remains were determined to be Native American, then the Native American tribes with interest in the area would be notified within 24 hours of discovery.

Hazardous and Toxic Materials

- Comply with Federal, State, and local requirements, as well as Army BMPs for handling and storing small quantities of products such as paint, oil, antifreeze, lubricants, and detergents.

MITIGATION MEASURES

No mitigation measures are necessary to reduce adverse environmental impacts to less than significant levels. To guard against the development of circumstances that could in limited cases result in site-specific adverse effects, the NGB and WVARNG will maintain their stewardship posture by implementing the BMPs for each resource area.

AGENCY AND PUBLIC INVOLVEMENT

Agencies consulted for this EA include the United States Army Corps of Engineers (USACE), United States Fish and Wildlife Service (USFWS), West Virginia Department of Environmental Protection (WVDEP), the Natural Resources Conservation Service (NRCS), WVDNR, the West Virginia Division of Forestry (WVDOF), the West Virginia Soil Conservation Agency, the West Virginia Geological and Economic Survey (WVGES), and the State Historic Preservation Office (SHPO). Copies of correspondence are provided in **Appendix B**.

Five Native American tribes were identified as having possible ancestral ties to the Kingwood area. Government-to-government consultation was initiated on 15 January 2009 with the following five federally recognized Native American tribes: the Seneca Nation of Indians, the St. Regis Mohawk Tribe, the Absentee Shawnee Tribe of Oklahoma, the Delaware Tribe of Indians, and the Eastern Band of Cherokee Indians. In a letter dated 28 January 2009, the St. Regis Mohawk Tribe responded to the request for consultation. The St. Regis Mohawk Tribe stated that the project is outside their area of consultation. The St. Regis Mohawk Tribe requested that if any human remains, funerary objects, sacred objects, or objects of cultural patrimony are encountered, they be notified immediately and all construction/investigations cease until concerns of all parties are addressed. A follow up letter was sent on 24 March 2014 to the tribes describing the status of the project and that the urban assault course had been replaced by the MK 19 range in the Proposed Action. To date, the St. Regis Mohawk is the only tribe to respond and they determined that they do not want to comment on the EA (see **Appendix B**).

The WVARNG has prepared a memorandum for record (MFR) of Native American Consultation efforts during the NEPA process. The MFR is included in **Appendix E**.

The WVARNG, as the proponent of the Proposed Action, will publish and distribute the final EA for a 30-day public comment period, as announced by a Notice of Availability (NOA) published in a local newspaper of general circulation. Review copies will also be made available for public review at the Kingwood Public Library in Kingwood, West Virginia. Throughout this process, the public may obtain information on the status and progress of the EA through the West Virginia National Guard Public Affairs Office.

CONCLUSION

This EA has been prepared to comply with the requirements of the National Environmental Policy Act of 1969 (NEPA), as amended (42 United States Code [U.S.C.] Section 4321–4347); the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500–1508); and the Army National Guard Manual for Compliance with the National Environmental Policy Act of 1969 (NEPA Handbook October 2011 edition).

Pursuant to Department of Defense (DoD) Directive 5105.77, *National Guard Bureau (NGB)*, dated 21 May 2008, the NGB serves as the principal advisor on matters involving the Army National Guard (ARNG), and is responsible for implementing DoD guidance on the structure and strength authorizations of the ARNG. The NGB is responsible for ensuring that ARNG activities are performed in accordance with applicable policies and regulations. As such, the NGB is the lead federal agency responsible for preparation of NEPA-compliant documentation on projects for which the WVARNG is the proponent. In that capacity, the NGB is ultimately responsible for environmental analyses and documentation; however, the local responsibility for NEPA document preparation falls upon the WVARNG (DoD Directive 5105.77).

This EA analyzes the potential for significant environmental effects associated with the Proposed Action and alternatives, including the No Action Alternative. If the analyses presented in this EA indicate that the Proposed Action would not result in significant environmental or socioeconomic effects, then a Finding of No Significant Impact (FNSI) will be prepared. A FNSI briefly presents the reasons why a proposed action would not have a significant effect on the human environment and why an Environmental Impact Statement (EIS) would not be necessary. If the analyses presented in this EA indicate that significant environmental effects would result from the Proposed Action that cannot be mitigated to insignificance, a Notice of Intent to prepare an EIS would be required or no action would be taken.

The evaluation performed in this EA concludes that there would be no significant adverse impact, either individually or cumulatively, to the local environment or quality of life associated with the implementation of the Preferred Action Alternative, provided that mitigation measures specified in this EA are implemented. This EA's analysis determines, therefore, that an Environmental Impact Statement (EIS) is unnecessary for implementation of the Preferred Action Alternative, and that a Finding of No Significant Impact (FNSI) is appropriate. Positive impacts to onsite land use, the local socioeconomic environment, and onsite infrastructure would be anticipated. This EA recommends implementation of the Preferred Action Alternative.

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ACRONYMS AND ABBREVIATIONS

AIRFA	American Indian Religious Freedom Act	FNSI	Finding of No Significant Impact
AR	Army Regulation	FPPA	Farmland Protection Policy Act
ARNG	Army National Guard	HGFR	Hand Grenade Familiarization Range
ARPA	Archaeological Resources Protection Act	HMMWV	High Mobility Multipurpose Wheeled Vehicle
ARRM	Army Range Requirements Model	HTMW	Hazardous and Toxic Materials and Waste
asl	Above Sea Level	ICRMP	Integrated Cultural Resources Management Plan
AWP	Allegheny Wood Products	IDT	Inactive Duty Training
BDE	Brigade	IICEP	Interagency and Intergovernmental Coordination for Environmental Planning
BEA	Bureau of Economic Analysis	INRMP	Integrated Natural Resources Management Plan
BMP	Best Management Practices	LFBF	Live Fire Breach Facility
BMTA	Briery Mountain Training Area	MFR	Memorandum for Record
CAA	Clean Air Act	MOGAS	Motor gasoline
CDCTC	Camp Dawson Collective Training Center	MRFR	Modified Record Fire Range
CEQ	Council on Environmental Quality	NAAQS	National Ambient Air Quality Standards
CFR	Code of Federal Regulations	NAGPRA	Native American Graves Protection and Repatriation Act
CO	Carbon Monoxide	NEPA	National Environmental Policy Act of 1969
CR	County Route	NGB	National Guard Bureau
DA	Department of Army	NHPA	National Historic Preservation Act
dB	decibels	NO _x	Nitrogen Oxides
dBA	A-weighted in decibels	NPDES	National Pollution Discharge Elimination System
dBp	Peak sound in decibels	NRCS	Natural Resources Conservation Service
DNL	Day-Night Sound Level	NRHP	National Register of Historic Places
DoD	Department of Defense		
DoDI	Department of Defense Instruction		
E&S	Erosion and Sedimentation		
EA	Environmental Assessment		
EIS	Environmental Impact Statement		
EN	Engineer		
EO	Executive Order		
FICUN	Federal Interagency Committee on Urban Noise		

O ₃	Ozone	TA	Training Area
ORAP	Operational Range Assessment Program	TC	Training Circular
PAM	Pamphlet	UAC	Urban Assault Course
PAO	Public Affairs Office	USACE	United States Army Corps of Engineers
Pb	Lead	USACHPPM	United States Army Center for Health Promotion and Preventative Medicine
PCMD	Polluted Coal Mine Drainage	USC	United States Code
PEM	Palustrine Emergent	USEPA	United States Environmental Protection Agency
PM ₁₀	particulates 10mm or smaller in diameter	USET	United South and Eastern Tribes, Inc.
PM _{2.5}	particulates 2.5mm or smaller in diameter	USFWS	United States Fish and Wildlife Service
PSS	Palustrine scrub-shrub	USGS	United States Geological Survey
R4SB	Riverine, intermittent streambed	WMA	Wildlife Management Area
RDP	Range Development Plan	WVARNG	West Virginia Army National Guard
ROCA	Range Operations and Control Area	WVDEP	West Virginia Department of Environmental Protection
RTI	Regional Training Institute	WVDNR	West Virginia Division of Natural Resources
SDZ	Surface Danger Zone	WVDOF	West Virginia Division of Forestry
SHPO	State Historic Preservation Office	WVGES	West Virginia Geological and Economic Survey
SO ₂	Sulfur Dioxide	WVNHP	West Virginia Natural Heritage Program
SPCCP	Spill Prevention, Control and Countermeasures Plan		
SR	State Route		
STRAC	Standards in Training Commission		

SECTION 1. PURPOSE, NEED, AND SCOPE

1.1 INTRODUCTION

This Environmental Assessment (EA) evaluates three proposed Briery Mountain Training Area (BMTA) ranges included in the West Virginia Army National Guard (WVARNG) 2013 Range Complex Master Plan (2013) and Range Development Plan (RDP) Update. These projects, comprising the Proposed Action, include construction and operation of a Live Fire Breach Facility (LFBF), a Hand Grenade Familiarization Range (HGFR), and MK 19 Range on the BMTA at the Camp Dawson Collective Training Center (CDCTC). Originally, WVARNG had considered a proposed Urban Assault Course (UAC) for BMTA but the UAC could not be located such that the surface danger zone (SDZ) remained within the BMTA. Therefore, the UAC is not included in the EA as a proposed project.

The Proposed Action is intended to provide ranges meeting current range requirements as set forth in the Department of the Army's (DA) Training Circular (TC) 25-8, *Training Ranges*, 20 May 2010 (DA, 2010). Providing these ranges would serve the wartime mission and combat readiness goals of the WVARNG, as evaluated in the current RDP. Details of the Proposed Action are provided in **Section 2.0**.

The CDCTC, a WVARNG facility, is a 3,797-acre state-managed military training complex located along the Cheat River drainage in northeastern West Virginia, approximately 3 miles southeast of Kingwood, in mountainous terrain (see **Figure 1**). The CDCTC is managed and operated by the West Virginia Department of Military Affairs and Public Safety on behalf of the WVARNG, which is responsible for management of the entire site. The BMTA is located about 3.5 miles south of the CDCTC Cantonment Area, occupies approximately 1,251 acres, and has substantial topographic relief (see **Figure 2 and 3**). Timber rights to the BMTA land are held by Allegheny Wood Products (AWP). Previously, the BMTA was open to the public for hunting when not being used for military training through a cooperative agreement with the West Virginia Division of Natural Resources (WVDNR) – Wildlife Resources Section, and was known as the Briery Mountain Wildlife Management Area (WMA). The [WMA] agreement was discontinued when the MRF range was made operational. Copies of the AWP and WVDNR cooperative agreements are included in **Appendix A**.

This EA is intended to promote public participation and to support and provide valuable input into the decision-making process associated with the Proposed Action. The EA provides information on the Proposed Action; its considered alternatives; a description of the affected environment; and an analysis of potential environmental, cultural, and socioeconomic consequences.

The WVARNG includes focused BMPs to maintain mission-oriented operational ranges that are based on the principles of sustainability as outlined in "The Army Strategy for the Environment Sustain the Mission - Secure the Future." In addition, the WVARNG's operational ranges are assessed a minimum of every 5 years under the Department of Army's Operational Range Program and recommendations are made that reinforce WVARNG's efforts.

1.2 BACKGROUND

The Proposed Action is part of the Army Transformation that began in 1999. The Secretary of the Army and the Army Chief of Staff articulated a vision about people, readiness, and transformation of the Army to meet challenges emerging in the 21st century, and the need to be able to respond more rapidly to different types of operations requiring military action (DA, 1999).

A final Programmatic Environmental Impact Statement addressing program-level impacts of the transformation program was completed in February 2002. In April 2002, the Army issued a Record of Decision reflecting its intent to transform the Army.

The National Guard Bureau (NGB) completed its Programmatic Environmental Assessment for Modularization of Army National Guard (ARNG) Forces in May 2005. Creation of modular forces continues the Army's ongoing transformation process designed to provide the Nation with combat forces that are more responsive, deployable, agile, versatile, lethal, survivable, and sustainable (NGB, 2005).

The WVARNG's 2013 Range Complex Master Plan identifies required marksmanship training facilities – either existing but not modernized, or not available – at the CDCTC, the primary WVARNG training site. Requirements are based on: 1) recent changes in the WVARNG's operational structure and units occurring due to transformation; and 2) the requirements to meet the training cycles of the Army Force Generation model as it applies to the State of West Virginia. Requirements are a function of the Combined Arms Training Strategies and Standards in Training Commission (STRAC) resourced training requirements developed and approved by Training and Doctrine Command and the Army Training Support Center.

1.3 PURPOSE AND NEED

The purpose of the Proposed Action is to provide the requisite training facilities at the BMTA for in-state training for WVARNG units, including those within its four major commands (the 77th Brigade [BDE] Troop Command, the 111th Engineer Brigade [EN BDE], the 772nd Troop Command, and the Homeland Defense Command) and other military units¹. The Proposed Action would provide in-state facilities for required training on tasks necessary for breaching techniques (the LFBF), employment of live fragmentation hand grenades (the HGFR), and gunnery exercises for the MK 19. In order to meet the short term immediate needs of the 197th RTI, a non TC 25-8 standard MK19 familiarization range was constructed in 2012. This project was accomplished using state labor and on-hand materials.

The Proposed Action is needed to ensure the WVARNG provides complete training facilities for its units to ensure attainment and maintenance of a full readiness posture, and to meet mission training objectives with sufficient land area as defined in TC 25-1. With presently available training facilities, local units are forced to travel greater than 25 percent of available Inactive Duty Training (IDT) weekend time to conduct much of the required training. Most of WVARNG's breach, live hand grenade familiarization, and MK 19 training is currently conducted at installations in other states, including Virginia, Pennsylvania, Kentucky, and New York. This travel time frequently violates Department of Defense Instruction (DoDI) 1215.18, *Reserve Component Member and Participation*, which establishes a reasonable travel distance as 100 miles or 3 hours for the unit for IDT. The aforementioned sites are located at substantially greater distances than this allowance.

The Proposed Action is also needed to ensure the continued and long-term viability of the CDCTC as a training center capable of providing the land and resources necessary to support the WVARNG's and other military users' assigned training missions. Implementation of the Proposed Action would support higher quality, mission-essential, and increased training activities at CDCTC, while limiting the need for out-of-state travel.

¹ The new ranges would be available to all ARNG units, as well as other Department of Defense (DoD) and civilian users as scheduling permits.

Requirements for the three proposed range projects comprising the Proposed Action are listed in **Table 1**.

Table 1. Proposed Range Development Plan Projects and Training Requirements			
Range		Training Requirement	
Live Fire Breach Facility (LFBF)		Requirement Documents: DA PAM 350-38, TC 90-1, TC 25-8, 21B & 31B MOSQ Re-Class POI, FM 3-0, FM 3-06, FM 3-06.11, ARTEP 7-8-MTP, 7-3/4-1110, TC 90-1, FM 3-22.9	
Hand Grenade Familiarization Range (HGFR)		ARNG Soldiers are required to throw a live hand grenade once every two years. Requirement Documents: TC 25-8, DA PAM 350-38, FM 3-23.30	
MK 19 Range		Requirement Documents: TC 25-8, DA PAM 350-38, 21B & 31B MOSQ Re-Class POI	
ARNG	Army National Guard	PAM	Pamphlet
DA	Department of the Army	POI	Program of Instruction
FM	Field Manual	TC	Training Circular

1.4 SCOPE OF THE ENVIRONMENTAL ASSESSMENT

This EA provides a detailed comparative analysis of the following alternatives:

- Configuration Alternative B (Preferred Action Alternative) – Implement the Proposed Action with the LFBF, HGFR, and MK 19 Range Alternative B configuration to fulfill the assigned mission requirements of the WVARNG.
- Configuration Alternative A (Build Alternative) – Implement the Proposed Action with the LFBF, HGFR, and MK 19 Alternative A configuration to fulfill the assigned mission requirements of the WVARNG.
- No Action Alternative – Continue with operations as currently conducted and do not implement the Proposed Action.

A detailed description of the Proposed Action is provided in **Section 2.0**. Descriptions of the Preferred Action Alternative, the Build Alternative, the No Action Alternative, and alternatives eliminated from detailed study are provided in **Section 2.0**.

This EA evaluates the potential environmental, cultural, and socioeconomic impacts of the emplacement, construction, and operation of the proposed LFBF, HGFR, and MK 19 range. Resource categories described in **Section 3.0** and evaluated in **Section 4.0** include land use; air quality; noise; geology, topography, and soils; ground and surface water resources; biological resources, including vegetation, wildlife, wildlife habitat, plant communities, protected species, and wetlands; cultural resources; socioeconomic environment and human health and safety, including children's health and safety risks; environmental justice; infrastructure; and hazardous and toxic materials and wastes. This EA also considers the cumulative effects of this Proposed Action when added to other past, present, and reasonably foreseeable actions within the region.

As specified under National Environmental Policy Act of 1969 (NEPA; 42 United States Code [USC] 4321 et seq.) and Council of Environmental Quality (CEQ) regulations (40 Code of Federal Regulations (CFR) 1500-1508), a monetary cost-benefit analysis is not required as part of the EA. The Proposed Action and its alternatives have been developed based on military training needs and mission requirements. As such, no quantitative financial assessment has been performed as part of this EA. However, economic factors that result in socioeconomic impacts to involved military installations and their surrounding regions of influence are addressed in this document, as required under NEPA.

1.5 DECISION-MAKING

Pursuant to Department of Defense (DoD) Directive 5105.77, *National Guard Bureau (NGB)*, dated 21 May 2008, the NGB serves as the principal advisor on matters involving the Army National Guard (ARNG), and is responsible for implementing DoD guidance on the structure and strength authorizations of the ARNG. The NGB is responsible for ensuring that ARNG activities are performed in accordance with applicable policies and regulations. As such, the NGB is the lead federal agency responsible for preparation of NEPA-compliant documentation on projects for which the WVARNG is the proponent. In that capacity, the NGB is ultimately responsible for environmental analyses and documentation; however, the local responsibility for NEPA document preparation falls upon the WVARNG (DoD Directive 5105.77).

The decision to be made is whether, having taken potential environmental effects into account, the WVARNG should construct and operate the proposed LFBF, HGFR, and MK 19 range at the BMTA and, as appropriate, implement measures to reduce effects on resources. The NGB, working with the WVARNG, will ultimately decide whether the action is funded and constructed.

1.6 PUBLIC PARTICIPATION

The WVARNG invites public participation in the decision-making process through the NEPA process. Public participation with respect to decision-making on the Proposed Action is guided by 32 CFR Part 651, the Army's policy for implementing NEPA. Consideration of the views and information from all interested persons promotes open communication and enables better decision-making. Agencies, organizations, and members of the public having a potential interest in the Proposed Action, including minority, low-income, disadvantaged, and Native American groups, are urged to participate. A record of public involvement, agency coordination, and Native American consultation is provided in **Appendix B**.

1.6.1 PUBLIC REVIEW

The WVARNG, as the proponent of the Proposed Action, will publish and distribute the final EA for a 30-day public comment period, as announced by a Notice of Availability published in a local newspaper of general circulation. Review copies will also be made available for public review at community libraries near the CDCTC.

As appropriate, the WVARNG may then execute the FNSI and proceed with implementation of the Proposed Action. If it is determined implementation of the Proposed Action would result in significant impacts, the WVARNG will either not take this action as proposed, or will publish in the Federal Register a Notice of Intent to prepare an Environmental Impact Statement (EIS). Throughout this process, the public may obtain information on the status and progress of the EA through the WVARNG Public Affairs Office (PAO).

1.6.2 AGENCY COORDINATION

Interagency and Intergovernmental Coordination for Environmental Planning (IICEP) is a federally-mandated process for informing and coordinating with other governmental agencies regarding Federal Proposed Actions. CEQ regulations require intergovernmental notifications prior to making any detailed statement of environmental impacts. Through the IICEP process, the WVARNG notifies relevant Federal, State, and local agencies and allows them sufficient time to make known their environmental concerns specific to a Proposed Action. Comments and concerns submitted by these agencies during the IICEP process are subsequently incorporated into the analysis of potential environmental impacts conducted as part of the EA. This coordination fulfills requirements under Executive Order (EO) 12372 (superseded by EO 12416, and subsequently supplemented by EO 13132), which requires Federal agencies to cooperate with and consider State and local views in implementing a Federal proposal. It also constitutes the IICEP process for this EA.

Agencies consulted for this EA include the United States Army Corps of Engineers (USACE), United States Fish and Wildlife Service (USFWS), West Virginia Department of Environmental Protection (WVDEP), the Natural Resources Conservation Service (NRCS), WVDNR, the West Virginia Division of Forestry (WVDFOF), the West Virginia Soil Conservation Agency, the West Virginia Geological and Economic Survey (WVGES), and the State Historic Preservation Office (SHPO). Copies of correspondence are provided in **Appendix B**.

1.6.3 NATIVE AMERICAN CONSULTATION

The WVARNG is conducting consultation with federally recognized Native American tribes as required under Department of Defense Instruction (DoDI) 4710.02 (Department of Defense [DoD] *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; NEPA; the National Historic Preservation Act (NHPA); and the Native American Graves and Protection and Repatriation Act (NAGPRA). Tribes were invited to participate in the EA and NHPA Section 106 processes as Sovereign Nations per EO 13175, *Consultation and Coordination with Indian Tribal Governments*, 6 November 2000.

Based on information provided in the WVARNG's Statewide Integrated Cultural Resources Management Plan (ICRMP), (September 2009) which includes the CDCTC, and prior consultation with the United South and Eastern Tribes, Inc. (USET)² and the SHPO, the WVARNG developed a list of federally recognized Native American tribes that may have historic interest in the area. Government-to-government consultation was initiated on 15 January 2009 with the following five federally recognized Native American tribes: the Seneca Nation of Indians, the St. Regis Mohawk Tribe, the Absentee Shawnee Tribe of Oklahoma, the Delaware Tribe of Indians, and the Eastern Band of Cherokee Indians. In a letter dated 28 January 2009, the St. Regis Mohawk Tribe responded to the request for consultation. The St. Regis Mohawk Tribe stated that the project is outside their area of consultation. The St. Regis Mohawk Tribe requested that if any human remains, funerary objects, sacred objects, or objects of cultural patrimony are encountered, they be notified immediately and all construction/investigations cease until concerns of all parties are addressed. A follow up letter was sent on 24 March 2014 to the tribes describing the status of the project and that the urban assault course had been replaced by the MK 19 range in the Proposed Action. No responses were received from the tribes to this follow up letter. Copies of this correspondence can be found in **Appendix B. A**

² USET is a non-profit inter-tribal organization that collectively represents its member Tribes at the regional and national levels.

Memorandum for Record (MFR), which summarizes the consultation efforts by the WVARNG, is included in **Appendix E**.

1.7 RELATED NATIONAL ENVIRONMENTAL POLICY ACT REVIEWS

Four NEPA documents completed over a few years provided resource material used in shaping and defining this EA. These prior NEPA documents, listed below, are complete and have been publicly circulated:

- WVARNG's Integrated Cultural Resources Management Plan (ICRMP) for Installations of the WVARNG 2009-2013 was completed in 2009 (AMEC, 2009).
- WVARNG's Integrated Natural Resources Management Plan (INRMP) and EA for Camp Dawson Collective Training Area 2002-2006 was completed in 2001. The INRMP was revised in 2007, with associated NEPA review (AMEC, 2007).
- EA prepared for the Modified Record Firing Range (MRFR) on the BMTA was completed in 2008.
- EA prepared for the Proposed Construction and Operation of Training Facilities at the Pringle Tract Training Area was completed in July 2012.

1.8 REGULATORY FRAMEWORK

This EA has been prepared under the provisions of and in accordance with the NEPA (42 USC 4321 et seq.), the *CEQ Regulations Implementing the Procedural Provisions of NEPA* (Sec. 1502.9 Draft, final, and supplemental statements; 40 CFR Parts 1500-1508), and 32 CFR 651 (*Environmental Analysis of Army Actions*, Final Rule). In addition, the document has been prepared as prescribed in the *Army National Guard NEPA Handbook* (NGB, 2011). A summary of regulations relevant to resource areas analyzed in this EA is included as **Appendix C**.

SECTION 2. DESCRIPTION OF THE PROPOSED ACTION

2.1 PROPOSED ACTION

The WVARNG's Proposed Action is to construct and operate three BMTA range projects to meet WVARNG's training requirements. These ranges include the LFBF, HGFR, and MK 19 range. Proposed BMTA projects are listed in **Table 2**. Development and evaluation of alternative sites, screening criteria for site selection, and specific range customization and configuration are presented below.

RDP Range Project	Description	Approximate Acreage	
		Range	SDZ
Live Fire Breach Facility	<p>The LFBF is used to train Soldiers semi-annually on the technical aspects of breaching techniques. It is also used to train Tactics, Techniques & Procedures and explosive techniques not trained on any other type of facility. No automation is required for this facility.</p> <p>Primary features include: Station 1 – Door Breaching Structure; Station 2 – Window Breaching Structure; and Station 3 – Wall Breaching Structure (each Breach Station consists of an 18 acre SDZ)</p>	0.4	152.3
Hand Grenade Familiarization Range	<p>This range is used to train and test individual Soldiers in the employment of live fragmentation hand grenades.</p> <p>Primary features include: An observation bunker and 4 throwing bays with sand-filled drums to provide an aiming point for the Soldier as he or she throws the grenade. No automation is required for this facility. All targets are fixed at required distances.</p> <p>Associated Range Operations and Control facilities: Standard Range Operations and Control Area (ROCA) Facilities, Except No Range Operations Center.</p>	2.41	31.59
MK 19 Range	<p>This range is used to train and test individual Soldiers on the skills necessary to engage stationary target emplacements with the 40-mm grenade launcher. No automation is required for this facility.</p> <p>Primary features include: 4 individual firing stations. All targets are fixed at required distances. The grenadier may fire on close-range, mid-range, and long-range targets.</p> <p>Associated Range Operations and Control facilities: Standard Range Operations and Control Area (ROCA) Facilities, Except No Range Operations Center.</p>	18.01	323.62
Total Potential Land Requirement		20.82	507.51

The actual land requirement depends on range configuration. Ranges will be configured to overlap, notably SDZ areas. The WVARNG's configuration analysis and alternative configurations are discussed in **Section 2.0**.

2.1.1 RANGE AREAS AND FOOTPRINT

The overall amount of land required to implement the Proposed Action depends on the selected range configuration. Ranges consist of two primary components: the physical range footprint, consisting of the firing positions, targetry, and support structures (specified in TC 25-8); and the Surface Danger Zone (SDZ), the area where the projectiles fired on the range will land based on the types of weapons and ammunition used (see **Section 2.2**). Ranges can be configured to overlap or have common areas, including the SDZs and the range support structure areas. With no overlapping, the land requirement (see **Table 2**) to construct the proposed range projects is approximately 20.82 acres for the range footprints and approximately 507.51 acres for the SDZs. With the SDZs overlapping, the land requirement to construct the range projects is approximately 20.82 acres for the range footprints and approximately 351 acres for the SDZs. The WVARNG conducted a siting analysis to evaluate various range configuration alternatives. The analysis and feasible alternative configurations are discussed below.

2.1.2 SURFACE DANGER ZONES

A SDZ is a mathematically-predicted area that a projectile will impact upon return to earth, either by direct fire or ricochet. The SDZ is the area extending from a firing point to a distance downrange based on the projectiles fired and weapon system used. The SDZ has specific dimensions for the expected caliber or the weapon being fired, so that all projectile fragments are contained in this area. The standard dimensions for SDZs are found in Department of the Army Pamphlet (DA PAM) 385-63, *Range Safety* (DA, 2012). The SDZ for a range must be contained within the controlled boundaries of a training site for the range to be considered buildable and usable without a special waiver. The ranges will use standard SDZs and all SDZs will be located within the BMTA boundaries. The WVARNG proposes to configure ranges to allow common SDZs on BMTA as much as possible without causing training conflicts (i.e., to allow proposed ranges to be used simultaneously, to the maximum extent possible) (see **Figures 4 and 5**). The use of common SDZs reduces the land requirement by approximately 157 acres.

2.1.3 RANGE OPERATIONS AND CONTROL AREAS

The TC 25-8 ranges listed in **Table 2** require a set of range support structures, called a standard Range Operations and Control Area (ROCA). A ROCA is the center for overall control and operation of the range, training exercises, administrative services, and support facilities. From the ROCA, activities are monitored for scoring and performance data review. The data are collected and distributed to the participants for an after action review. The WVARNG proposes to combine ROCA facilities to the extent possible to reduce cost, increase efficiency, and reduce land requirements associated with this proposal.

2.1.4 ACCESS AND MAINTENANCE ROADS

Access to the ranges would generally be provided by crushed stone roadways, extending to the ranges from existing BMTA roads/logging trails, to minimize addition of new impervious surfaces. Access roadways would be designed to support vehicles anticipated to use the ranges, and would meet site-specific soil conditions. Maintenance roads, located around range perimeters to provide access to target emplacements for installation and maintenance operations, would also be constructed of crushed stone.

The WVARNG does not anticipate the need for a large amount of land clearance as numerous logging trails exist within the BMTA that can be utilized to create new access and maintenance roads. In 2012, Allegheny Wood Products, while performing harvesting operations on other areas of the BMTA per the timbering agreement, removed timber in the area where the MK 19

range was proposed. This action was beneficial to both parties in terms of efficiency and cost savings. Timber was removed via the existing access trail. The potential areas for the LFEB and HGFR were not cleared at this time. The WVARNG estimates that any additional land clearance needed to improve existing logging trail to provide suitable access would be less than approximately 2,000 linear feet or 1.0 acres in area.

2.1.5 CONSTRUCTION

Land improvement activities would include land clearing, improvements to existing logging trails in the area, fencing, and making general site and target location improvements. Range construction work for the LFEB and HGFR will be accomplished via contract. No blasting will be needed within the construction footprints to establish level ground. No grading will occur in the SDZs.

Permits required during construction would include a West Virginia National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharge Associated with Construction Activities. Design and construction could begin as early as 2014.

Borrow material would be obtained from on-site cuts, resulting in a balanced, on-site soil equation. Construction traffic (equipment and worker vehicles) would travel to the BMTA using Whetzell Settlement Road, with Southgate Road also used to travel from the Cantonment Area to the BMTA (see **Figure 2**).

2.1.6 UTILITIES

No utilities are required for the LFBF, HGFR, and MK 19 range. If electricity is needed for future infrastructure, WVARNG would link to existing power lines west of BMTA boundary.

2.1.7 OPERATION

Operation of the ranges would be conducted in accordance with the CDCTC Standard Operating Procedures (SOPs) concerning safety and environmental stewardship.

2.1.8 PROJECTED FACILITY USAGE

The new ranges would be available to all ARNG units, as well as other DoD and civilian users as scheduling permits. For the most part, units currently training at CDCTC would be the same units using the new ranges. Anticipated WVARNG range usage would be dependent on training requirements of each unit to meet STRAC standards for each weapon system used on the proposed ranges. Excess range capacity would be available for scheduling and training by others through standard WVARNG scheduling procedures. A list of current CDCTC users is provided in **Appendix D**, along with usage by customer (i.e., ARNG, other DoD, and Non-DoD).

According to the Army Range Requirements Model (ARRM), the WVARNG estimates that site utilization could increase by approximately 53 range days per year (all users).

Vehicle Use: Vehicle use related to the proposed ranges would involve troop and equipment transport activities. Troop and equipment transport activities would occur within CDCTC boundaries and between the CDCTC and home unit locations. Both military and personal vehicles would be used. Military vehicles could include the M35 2½-ton cargo truck, the High-Mobility Multipurpose Wheeled Vehicle (HMMWV), and buses.

The actual number of vehicles would depend on the mix of individual drivers and military vehicles. Total traffic volumes of CDCTC-related users may increase by 25 percent over current conditions in the vicinity of BMTA, and would occur during daytime hours.

2.1.9 WEAPONS AND AMMUNITION

The types of ammunition anticipated to be fired on the proposed ranges are listed in **Table 3**.

Table 3. Anticipated Weapons and Ammunition Usage at Proposed Ranges		
Range Project	Weapon(s)	Ammunition
LFBF	Shotguns	Shotgun shells Detonation Charge C4 explosive Grenades: M-385 (40 mm TP)
HGFR	n/a	Hand grenades
MK 19	40-mm grenade launcher	M281 MOD 1 training round (TP)
TP	Training Practice (inert)	

2.2 ALTERNATIVES CONSIDERED

NEPA, CEQ regulations, and 32 CFR 651 require all reasonable alternatives to be rigorously explored and objectively evaluated. Alternatives that are eliminated from detailed study 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 the WVARNG to accomplish the primary mission of providing suitable facilities to meet established training requirements within the State of West Virginia. “Unreasonable” alternatives would not enable the WVARNG to conduct this training within the state to the required proficiency standards as described in **Section 1.0**.

2.2.1 SCREENING CRITERIA

During development of the Range Complex Master Plan and Range Development Plan Annual Review and Update, the WVARNG used the “*comparison of nonquantitative benefit*” technique to evaluate each proposed range and develop a decision matrix. The WVARNG selected this method because it has historically been used by decision makers to evaluate the impacts or effectiveness of alternative courses of action when the detailed cost estimates, environmental impacts, or other strategic planning considerations are not fully known or developed (WVARNG, 2008). Four major attributes were used. Each attribute in the decision matrix was weighted by a factor consistent with the Range Training and Land Program Requirements Review and Prioritization Board’s relational values as outlined in AR 210-21. The four attributes and their weighting factors are as follows:

- **Mission Support:** the potential mission support impacts of the alternative based on the known or expected capability to provide standardized and realistic training (40 percent)
- **Environmental Stewardship:** the potential environmental impacts of the alternative (25 percent)
- **Economic Feasibility:** the potential economic feasibility impacts of the alternative based on the expected command level needed to resource the alternative (15 percent)
- **Productivity Enhancement:** the potential productivity enhancement of the alternative based on known or expected cost-benefit savings for the WVARNG base operating and maintenance budget (20 percent)

This analysis determined that:

1. Maintaining the status quo was not a reasonable alternative for any of the required ranges because of inferior mission support.
2. New Construction is the preferred scenario for the three proposed ranges: LFBF, HGFR, and MK 19 range.

In addition to the alternatives analysis conducted as part of the RCMP and RDP Update process, the WVARNG developed and applied the following criteria to screen and evaluate possible alternatives for the three proposed ranges discussed in **Section 2.0** of this EA. The WVARNG identified that a suitable alternative would meet the majority, if not all, of the following criteria:

- 1) Located within an existing WVARNG facility, preferably on property owned by the WVARNG to avoid land acquisition costs
 - 2) Retain all standard SDZs within WVARNG owned or controlled property per DA Pam 385-63
 - 3) Achieve a shared impact area with common SDZs to the maximum extent possible to minimize land commitment and allow for other required training to occur now and in the future (i.e., allow for future training expansion, currently undetermined)
 - 4) Have a sufficient amount of relatively level land, preferably previously disturbed or cleared to avoid environmental impacts and reduce construction costs
 - 5) Avoid excessive travel times and cost for WVARNG units to be trained
 - 6) Be within a reasonable distance to populated areas in adjacent states to facilitate regional usage
 - 7) Be a sufficient distance from population centers to limit off-Post noise and dust concerns³
-
- 8) Be compatible with other current and approved future uses within the BMTA
 - 9) Optimize use of space within the BMTA to include the use of existing logging trails for access as opposed to constructing new access roads
 - 10) Achieve a shared impact area with the existing MRFR SDZ to the extent possible
 - 11) Maximize concurrent operation, with a goal of concurrent training on all proposed ranges to maximize training range availability
 - 12) Be within areas with few existing known environmental constraints, notably wetlands and streams
 - 13) Minimize earth disturbance needed to establish line of sight between firing point and targetry

³ The first seven criteria drove site selection within the State of West Virginia; the subsequent eight criteria drove specific proposed project siting within the BMTA, once it became clear that the BMTA at the CDCTC was the only location in West Virginia capable of meeting the first seven criteria.

- 14) Ensure no net loss in the capacity of the WVARNG or the BMTA to support the military mission

As noted above, through application of the first seven screening criteria, it became readily apparent to the WVARNG that the BMTA at the CDCTC is the only location in the State of West Virginia capable of meeting these seven screening criteria. The CDCTC is the only WVARNG training asset of sufficient size to accommodate the required TC 25-8 standard ranges (Criteria #2 and #4). Since the CDCTC is already the WVARNG's primary training site, adding this training capability onsite would avoid or reduce various units' travel time and cost to train in other states (Criterion #5).

The CDCTC is within 500 miles of 50 percent of the nation's population and within 50 miles of populated areas in the adjoining states of Maryland, Pennsylvania, and Ohio. Additionally, the CDCTC has been named one of two Joint Interagency National Training Centers in the Nation. Having the LFBF, HGFR, and MK 19 range at the CDCTC would be a regional asset that could be used by WVARNG as well as other clients (Criterion #6).

The BMTA is the only training area (TA) at the CDCTC of sufficient size that the WVARNG owns in its entirety (Criterion #1 and #2). In addition, the BMTA has been the site of logging activities for many decades. This has left the area strewn with logging trails that can be improved for access to range areas as opposed to constructing new access roads. The SDZs achieve a shared impact area (Criterion #3). While some land will have to be cleared/graded for the ranges, no blasting will be needed within the construction footprints to establish level ground (Criterion #4). No grading will occur in the SDZs. CDCTC is the main training area for WVARNG and BMTA and therefore, will avoid or reduce travel times and costs to train in other states (Criterion #5). Population in this rural area is sparse, and no conflicting future land use plans were identified (Criteria #7 and #8). The BMTA is mountainous and relatively undisturbed with the exception of timber harvest activities.

Once the BMTA was identified as the only viable location, the WVARNG subsequently completed a detailed evaluation process for siting the LFBF, HGFR, and MK 19 range. Various alternative locations were evaluated for their ability to accommodate the three ranges and SDZs while not interfering with operation of the existing MRFR and light demolition range (see **Figure 3**). The Proposed Action is compatible with other current and approved uses with the BMTA, optimizes use of space, and achieves a shared impact area with the MRFR (Criterion #8, #9 and #10). The range footprints will minimize earth disturbance, contain few environmental constraints, maximize opportunities for concurrent training, and will cause no net loss in the capacity of the WVARNG to support the military mission (Criterion #11, #12, #13, and #14).

2.3 EVALUATED ALTERNATIVES

The WVARNG's planning process included extensive screening and site optimization efforts. This process eliminated locations that did not meet the specified screening criteria and those that were not feasible due to SDZ constraints. This EA provides a detailed comparative analysis of three alternatives, which are described in the following sections.

2.3.1 RANGE CONFIGURATION ALTERNATIVE B (PREFERRED ALTERNATIVE)

The Range Configuration Alternative B (Preferred Action Alternative) represents an alternative range configuration that also meets the criteria in **Section 2.2.1** for implementing the Proposed Action. Components of the Range Configuration Alternative B have been sited within the BMTA to minimize and/or avoid potential impacts to known environmental resources. The proposed range configuration and the outside limits of the SDZs for the ranges are shown in **Figure 5**.

Ongoing operations and approved projects would continue, as modified by the Proposed Action identified and evaluated in this EA. Alternative B is carried forward and analyzed in **Section 4: Environmental Consequences**.

Under the Preferred Alternative (Alternative B), the proposed LFBF, HGFR, and MK 19 range identified in **Table 2** would be constructed and operated as described in **Section 2.1**. Under the Preferred Action Alternative, the MK 19 range would be located in the southwest corner of the BMTA, with the HGFR and LFBF located east of the MK 19 range (see **Figure 5**). The Preferred Action Alternative would require a total of approximately 20.82 acres of land for the construction of the HGFR (2.41 acres), the LFBF (0.4 acres), and the MK 19 range (18.01). An additional 351 acres of BMTA land would be designated as the ranges' SDZ during range operation. No grading would occur within the SDZ. WVARNG determined that Alternative B is the preferred alternative because Alternative B LFBF's SDZ has more of an overlap with the existing MRFR's SDZ and slightly more of an overlap with the MK 19 range's SDZ and therefore, Alternative B would require less land for operation. By moving the LFBF farther away from the MK 19 range, Alternative B reduces potential conflicts between these two ranges and would allow operation of both ranges simultaneously. Existing logging trails will be utilized for access. Alternative B would allow better usage of the existing trail for access.

Constructing and operating these ranges at the BMTA is the only alternative capable of supporting higher quality, mission-essential, and increased training activities at CDCTC, while limiting the need for out-of-state travel.

2.3.2 RANGE CONFIGURATION ALTERNATIVE A (BUILD ALTERNATIVE)

The Range Configuration Alternative A (Build Alternative) represents a range configuration that meets the criteria in **Section 2.2.1** for implementing the Proposed Action. Components of the Range Configuration Alternative A have also been sited within the BMTA to minimize and/or avoid potential impacts to known environmental resources. The proposed range configuration and the outside limits of the SDZs for the ranges are shown in **Figure 4**. Ongoing operations and approved projects would continue, as modified by the Proposed Action identified and evaluated in this EA. Alternative A is carried forward and analyzed in **Section 4: Environmental Consequences**.

Under the Build Alternative (Alternative A), the three proposed range projects identified in **Table 2** would be constructed and operated as described in **Section 2.1**. This alternative would still provide the land and resources necessary to sustain quality military training and maintain and improve the units' readiness postures. Under Alternative A, the MK 19 range would be positioned in the same location as Alternative B and require an equal amount of acreage. Under Alternative A, the locations of the HGFR the LFBF would be reversed. The LFBF would be located adjacent to the MK 19 range. The same amount of acreage would be needed for range construction in Alternative A as in Alternative B. However, Alternative A LFBF's SDZ has less of an overlap with the existing MRFR SDZ and slightly less of an overlap with the MK 19 range SDZ.

2.3.3 NO ACTION ALTERNATIVE

Under this alternative, the Proposed Action would not be implemented. Current installation operations would continue. No new construction projects would be authorized except those already under construction, contracted for construction, or authorized for construction. This alternative would limit the capability of the WVARNG to carry out its assigned mission to provide adequate training facilities, and would not meet the purpose of or need for the Proposed Action.

However, this Alternative was retained to provide a comparative baseline analysis as required under Federal law.

Required training would continue to be conducted at installations where space is available, primarily in the adjacent states of Kentucky and Pennsylvania. This would continue to cause units to risk not meeting STRAC requirements, and to use excessive training time for travel, potentially resulting in an inability to meet training proficiency standards.

2.4 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

2.4.1 USE OF OTHER WVARNG TRAINING SITES

Through applying the site screening criteria and subsequent analysis described in **Section 2.2.1**, the WVARNG determined no other suitable location within the State of West Virginia or CDCTC is currently available to satisfy the purpose of and need for this Proposed Action. The CDCTC is comprised of six major training areas: Camp Dawson, Volkstone TA, BMTA, Pringle Tract, Gold Mine Tract, and Whitehair Tract. Camp Dawson and BMTA are the only land tracts owned in their entirety by the WVARNG (Criterion #1 in **Section 2.2.1**). Camp Dawson contains the main Cantonment Area for the WVARNG and does not have sufficient available land acreage to accommodate the Proposed Action (Criteria #2, and #4 in **Section 2.2.1**).

The Volkstone TA, Gold Mine Tract, and Whitehair Tract do not have sufficient land acreage for the proposed ranges and SDZs. The Pringle Tract no longer has available land for the proposed ranges as improved training facilities have been evaluated and approved for the Pringle Tract.

2.4.2 ESTABLISHMENT OF A NEW TRAINING SITE

Under this alternative, the WVARNG would identify a suitable large tract of available land near CDCTA to develop a training area. The WVARNG would construct new training facilities at the new parcel. This alternative was examined but eliminated due to the fact that, as a primary component of Base Realignment and Closure, the DoD is eliminating and/or consolidating many installations throughout the U.S. As sufficient land area is available at the CDCTC to accommodate the required ranges, the WVARNG determined that, in accordance with DoD directives and vision, establishment of a new training site was neither feasible nor necessary. This alternative does not meet Screening Criteria #1 as outlined in **Section 2.2.1**. Analysis of this alternative is not carried forward in this EA.

2.4.3 REDUCED NUMBER/SCALE OF RANGES

As part of the Range Complex Master Plan and the Range Development Plan described in Section 2.2.1, the potential for a reduced-scale alternative was considered and evaluated. The Preferred Action Alternative represents the optimum, and minimum, range development necessary to meet the purpose of and need for the Proposed Action. Eliminating proposed ranges would not meet the WVARNG's specified training requirements. Reducing the size of proposed ranges is also not possible as the proposed ranges are required to meet the standards outlined in TC 25-8. The reduced-scale alternative does not meet Screening Criteria #14 in Section 2.2.1, and therefore, was removed from further consideration.

2.4.4 ALTERNATIVE IMPACTS COMPARISON MATRIX

The alternative impacts comparison matrix summarizes potential impacts of Alternative B: Preferred Action Alternative, Alternative A, and the No Action Alternative.

Technical Resource Area	No Action Alternative	Preferred Action Alternative (Alternative B)	Build Alternative (Alternative A)
Geographic Setting and Location	No impact attributable to WVARNG action.	Less-than-significant adverse impact through the removal of vegetative cover within the footprint of the LFBF, HGFR, and MK 19 range and minor alteration of the site's topographic during construction. No change anticipated in the SDZs.	Less-than-significant adverse impact through the removal of vegetative cover within the footprint of the LFBF, HGFR, and MK 19 range and minor alteration of the site's topographic during construction. No change anticipated in the SDZs.
Land Use	No impact attributable to WVARNG action.	Short- and long-term positive impact through the development of the site.	Short- and long-term positive impact through the development of the site.
Air Quality	No impact attributable to WVARNG action. Ongoing operations' emissions would continue at current location.	Short-term, less-than-significant adverse impacts due to the potential for dust generation from construction activities. Would be reduced by the implementation of BMPs. Long-term, less-than-significant adverse impacts by increasing site emissions from facility operations/activities and WVARNG traffic.	Short-term, less-than-significant adverse impacts due to the potential for dust generation from construction activities. Would be reduced by the implementation of BMPs. Long-term, less-than-significant adverse impacts by increasing site emissions from facility operations/activities and WVARNG traffic.
Noise	No impact attributable to WVARNG action. Ongoing operations' noise impacts would continue at current location.	Minor short- and long-term, less-than-significant adverse impacts from construction and operation of the facilities.	Minor short- and long-term, less-than-significant adverse impacts from construction and operation of the facilities.
Geology, Topography, and Soils	No impact attributable to WVARNG	Short-term, less-than-significant adverse impact to soils during construction through grading. Impacts	Short-term, less-than-significant adverse impact to soils during construction through

Technical Resource Area	No Action Alternative	Preferred Action Alternative (Alternative B)	Build Alternative (Alternative A)
	action.	would be reduced with implementation of BMPs.	grading. Impacts would be reduced with implementation of BMPs.
Water Resources	No impact attributable to WVARNG action.	Short-term, less-than-significant adverse impacts to surface waters due to soil erosion and consequent sedimentation during construction. Impacts would be reduced with implementation of BMPs.	Short-term, less-than-significant adverse impacts to surface waters due to soil erosion and consequent sedimentation during construction. Impacts would be reduced with implementation of BMPs.
Biological Resources	No impact attributable to WVARNG action.	Short- and long-term, less-than-significant adverse impacts to biological resources through habitat conversion. Impacts would be reduced with implementation of BMPs.	Short- and long-term, less-than-significant adverse impacts to biological resources through habitat conversion. Impacts would be reduced with implementation of BMPs.
Cultural Resources	No direct impact attributable to WVARNG action.	No direct impact anticipated from range construction as no cultural resources within range footprint.	No direct impact anticipated from range construction as no cultural resources within range footprint.
Socioeconomics	No impact attributable to WVARNG action.	Short- and long-term positive impact.	Short- and long-term positive impact.
Recreation	No impact attributable to WVARNG action.	Short- and long-term, less-than-significant adverse impacts due to reduced recreational activity during range use.	Short- and long-term, less-than-significant adverse impacts due to reduced recreational activity during range use.
Utilities	No impact attributable to WVARNG action.	No impact anticipated.	No impact anticipated.

Technical Resource Area	No Action Alternative	Preferred Action Alternative (Alternative B)	Build Alternative (Alternative A)
Infrastructure	No impact attributable to WVARNG action.	Short- and long-term, less-than-significant adverse impacts due to construction and increased operational traffic. Would be reduced with implementation of BMPs.	Short- and long-term, less-than-significant adverse impacts due to construction and increased operational traffic. Would be reduced with implementation of BMPs.
Hazardous and Toxic Materials/Wastes (HTMW)	No impact attributable to WVARNG action. Existing HTMW management plans would continue to be implemented.	Short- and long-term, less-than-significant adverse impacts due to construction activities and HTMW use/generation from operation activities. Would be controlled through ongoing regulatory compliance and BMPs.	Short- and long-term, less-than-significant adverse impacts due to construction activities and HTMW use/generation from operation activities. Would be controlled through ongoing regulatory compliance and BMPs.
Cumulative Impact	No impact attributable to WVARNG action.	Long-term, less-than-significant adverse impacts.	Long-term, less-than-significant adverse impacts.

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SECTION 3. AFFECTED ENVIRONMENT

This section specifically describes current baseline conditions within the proposed BMTA at CDCTC, with emphasis on those resources potentially impacted by the Proposed Action and alternatives. Section 4.0 Environmental Consequences, identifies potential direct, indirect, and cumulative effects of the identified project alternatives on each of the issue areas presented in this section. Section 4.0 also contains mitigation measures that, when implemented, would reduce the level of identified impacts to acceptable levels.

3.1 LOCATION DESCRIPTION

The 3,797-acre CDCTC is located along the Cheat River drainage in northeastern West Virginia, approximately 3 miles southeast of Kingwood in mountainous terrain. The facility's boundaries extend across the Portland and Kingwood Districts in Preston County, West Virginia. The rugged terrain, cool climate, and infertile soils limit agriculture, resulting in a mostly forested land cover. The high hills and low mountains are covered by a mixed mesophytic forest with areas of Appalachian oak and northern hardwood forest. Coal mining is the major industry in this region. Bituminous coal mines are common, and have caused siltation and acidification of many local creeks and rivers.

The BMTA, located 3 miles south of the Camp Dawson Proper, is approximately 1,225 acres in area (see **Figure 2**). Primary access to the BMTA is provided by Whetzell Settlement Road. This road intersects State Route (SR) 7 approximately 1.5 miles east of Kingwood, the county seat. Whetzell Settlement community resides along this road. Numerous logging roads and jeep trails provide vehicular access, and fragment much of the area.

The regional climate of Preston County is classified as Humid Mesothermal. This climate zone is characterized by a 40-inch average annual precipitation and relatively moderate temperatures. Predominant winds are from the west. Winters are moderate, but because of the terrain, snow is probably the area's greatest storm hazard.

3.2 LAND USE

3.2.1 REGIONAL LAND COVER AND LAND USE

Preston County land use includes logging operations, some agriculture, and limited surface and deep mining for coal, although coal mining has drastically declined due to Federal regulations, in particular, the 1977 Surface Mining Control and Reclamation Act (33 USC 1234-1328). Some industry (e.g. railroad, car cleaning, and public utilities) can be found along the Cheat River, particularly toward Albright, West Virginia. There are no zoning/land use restrictions or regulations outside of towns or corporations in West Virginia.

The area around the CDCTC is rural, heavily forested, with steep hills. The installation is bound to the north by the Preston County Country Club and golf course, and the by the Cheat River to the west. The small town of Albright is 4 miles north of the main gate and the City of Kingwood is approximately 3 miles to the northwest.

3.2.2 CDCTC LAND USE

The CDCTC is divided into three distinct, non-contiguous TAs (**Figure 2**). These three TAs, listed in **Table 4**, are all federally supported.

Table 4. Summary of Training Area Ownership and Acreages			
Training Area	State-owned	Federally-owned	Privately-owned
Cantonment Area			
Camp Dawson Proper	410	--	--
Volkstone	--	504	--
Non-Contiguous Areas			
BMTA	1251	--	--
Pringle Tract	90	--	1542

The most frequent field training activity at CDCTC is unit level tactical training, which includes small arms and non-mechanized tactical maneuver training or field exercises. CDCTC facilities are also used to conduct training conferences for DoD, State, and Federal agencies. The site is primarily used for classroom training from November through March, with limited field training. From May to August, the facility is used throughout the week for classroom and field training. Training facilities are also made available to active and reserve components of the Navy, Marines, Air Force, Army, and non-DoD agencies such as the Federal Bureau of Investigation, Drug Enforcement Agency, Department of State, Boy Scouts of America, WVDNR, WVDOF, and WVDEP. For additional information on types of training by training area, refer to **Appendix D**.

3.2.3 BRIERY MOUNTAIN LAND USE

The approximately 1,251-acre BMTA is almost entirely forested with substantial topographic relief (**Figure 2**). Portions of the east-central and west-central BMTA are cleared and used as a helicopter landing zone and a bivouac area (Naylor Landing Zone and the Calvert bivouac site). The southern portion of BMTA contains a small limestone quarry, a demolition range, and a bivouac area. A shoot house is located in the far southern portion of the property. A 16-lane MRFR is in the northern portion of the training site as shown in **Figure 3**.

Training activities at the BMTA include tactical, demolitions, and weapons training (on the MRFR, now under construction). Tactical training typically involves land navigation, bivouacking, and constructing fortification and defensive positions; command post exercises; logistical exercises; specialized training; and can also include using blank ammunition, pyrotechnics, and smoke.

Timber rights to the BMTA are held by AWP. The State of West Virginia and AWP entered into a lease agreement in 1996. The lease lasts 50 years with the option to extend the lease 5 years. The lease may be terminated by the State upon giving 30 days written notice to the Lessor, such notice given at least 30 days prior to the last day of the succeeding month (**Appendix A**). The majority of the BMTA was selectively harvested in 1997 and 1998 by AWP, and the northern portion was clearcut in 2008. Additional areas have been clearcut in 2012. One benefit of historical logging on the BMTA is the abundance of past logging trails that can be improved and used for access for new ranges and training venues.

When not being used for military training, the area is open to the public as the Briery Mountain WMA. Hunting is permitted in accordance with state seasons and regulations set forth by the WVDNR in cooperation with the WVARNG (**Appendix A**).

3.3 AIR QUALITY

The USEPA is the overall regulatory agency for air quality throughout the United States. Federal air quality requirements are set forth in the Clean Air Act (CAA) (42 USC §7401 *et seq.*), as amended, and implementing regulations. The primary regulatory authority for air quality in West Virginia is the West Virginia Department of Environmental Protection (WVDEP – Division of Air Quality).

The ambient air quality in an area can be characterized in terms of whether or not it complies with the primary and secondary National Ambient Air Quality Standards (NAAQS). The Clean Air Act, as amended (CAA) requires the United States Environmental Protection Agency (USEPA) to set NAAQS for pollutants considered harmful to public health and the environment. NAAQS are provided for six principal pollutants, called “criteria pollutants” (as listed under Section 108 of the CAA): carbon monoxide (CO); lead (Pb); nitrogen oxides (NO_x); ozone (O₃); particulate matter, divided into two size classes of 1) aerodynamic size less than or equal to 10 micrometers (PM₁₀), and 2) aerodynamic size less than or equal to 2.5 micrometers (PM_{2.5}); and sulfur dioxide (SO₂).

Areas are designated by the USEPA as “attainment”, “nonattainment”, “maintenance”, or “unclassified” with respect to the NAAQS. Regions in compliance with the standards are designated as “attainment” areas. In areas where the applicable NAAQS are not being met, a “nonattainment” status is designated. Areas that have been classified as “nonattainment” but are now in compliance can be redesignated “maintenance” status if the state completes an air quality planning process for the area. Areas for which no monitoring data is available are designated as “unclassified,” and are by default considered to be in attainment of the NAAQS.

The General Conformity Rule (40 CFR Part 51, Subpart W) requires Federal agencies to prepare written Conformity Determinations for Federal actions in or affecting NAAQS in non-attainment areas, except when the action is covered under the Transportation Conformity Rule or when the action is exempted because the total increase in emissions is insignificant, or a de minimis amount. Air quality in Preston County is designated “in attainment” for all criteria pollutant NAAQS (USEPA, 2009). Therefore, a conformity analysis is not required for this project.

The BMTA does not contain any State-permitted air emissions sources.

3.3.1 SENSITIVE RECEPTORS

With regard to air quality, sensitive populations include, but are not limited to, asthmatics, children, and the elderly, as well as specific facilities, such as long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, and childcare centers. These sensitive population segments and facilities correspond with those that the primary NAAQS are intended to protect.

Sensitive receptors within 1 mile of the BMTA boundary are scattered rural residences and Amblersburg (approximately 1.5 miles east on the other side of Briery Mountain). Amblersburg has less than 100 residences. No schools, hotels, health care facilities, or day care centers exist within close proximity of the BMTA. The nearest school is approximately 5 miles south of the BMTA (Rowlesburg Elementary School).

3.4 NOISE

3.4.1 BACKGROUND

Noise is generally defined as unwanted sound. It can be any sound that is undesirable because it interferes with communications or other human activities, is intense enough to damage hearing, or is otherwise annoying. Noise may be intermittent or continuous, steady or impulsive. Human response to noise varies, depending on the type of the noise; distance from the noise source; sensitivity; and time of day. Scattered residences are within one mile of the proposed site.

Land use guidelines identified by the Federal Interagency Committee on Urban Noise (FICUN) are used to determine compatible levels of noise exposure for land use planning and control (FICUN, 1980). Chapter 14 of AR 200-1 implements Federal regulations associated with environmental noise from DA activities. The decibel (dB) is the accepted unit of measurement for noise level, and it uses a logarithmic scale. The A-scale decibel (dBA) is an adjusted dB that corresponds to the range of normal human hearing. One of the metrics used by the DA to quantify the noise environment at DA installations is Peak sound level (dBP), which is the maximum instantaneous sound level of an event. The dBP is neither weighted nor time integrated, and is used to further define noise zones. Another metric used in defining noise zones is the Day-Night Average Sound Level (DNL). The DNL represents sound levels measured by totaling and averaging levels during a 24-hour period. People are usually more sensitive to sound levels at night based on low background sound levels; therefore, a 10 dB "penalty" is added to operations occurring between the hours of 10:00 PM and 7:00 AM. Thus, one nighttime sound event is equivalent to 10 daytime events of the same level.

AR 200-1 Section 14-4 defines land use compatibility concerning environmental noise for DA activities. A summary of expected noise levels for three general defined noise zones are presented in **Table 5**.

Noise Zone	Population Highly Annoyed	Noise Sensitive Land Use	Small Arms and Transportation DNL	Small Arms Peak
Zone I	<15%	Acceptable	<65 dBA	<87 dBP
Zone II	15%-39%	Normally Recommended	65-75 dBA	87-104 dBP
Zone III	>39%	Not Recommended	>75 dBA	>104 dBP

3.4.2 CDCTC NOISE ENVIRONMENT

According to CDCTC personnel, noise associated with training activities has not been an issue to off-site receptors. The noise environment at the CDCTC includes the effects of impulse and non-impulse noise. Training is WVARNG's mission at the CDCTC, and the WVARNG is involved in activities required for combat readiness of the personnel involved. To simulate actual battle conditions, realistic sound levels are typically a necessary part of training operations. Examples of current noise-producing activities at the CDCTC include:

- Motor vehicle convoys
- General light vehicle use
- Construction activities
- Use of authorized personal vehicles
- Helicopter training
- Firing small arms ammunition

- General troop training
- Demolition training

3.4.3 BMTA NOISE ENVIRONMENT

The MRFR will result in some areas beyond the boundary of the BMTA being exposed to peak noise levels within Noise Zones II and III as defined in **Table 5** and illustrated on **Figure 6**. Noise Zone III extends approximately 150 feet west and 700 feet east of the BMTA boundary. These areas are undeveloped forest and void of any sensitive receptors. Noise Zone II extends beyond the BMTA boundary to the north, east, and west. Modeling results indicate five residences⁴ and a hunting cabin are within Noise Zone II (peak noise levels between 87 and 104 dBP). These residences currently experience infrequent noise associated with small arm training (firing using blanks) and hunting activities.

The demolition range, located in the southern end of the BMTA, is used approximately 60 days per year. A variety of explosive charges are used ranging from 1 to 40 pounds (lb). The number of charges detonated each year does not produce an annual average noise contour, but peak noise levels from individual events could be annoying. **Figure 6** illustrates the predicted peak noise levels associated with a 40 lb charge (worst case scenario). The areas of high complaint risk (>130 dBP) and moderate complaint risk (115-130 dBP) extend beyond the eastern, southern, and western boundaries into uninhabited areas with some scattered residential land uses. According to CDCTC personnel, noise associated with CDCTC training activities has not been an issue to off-site receptors.

3.4.4 CDCTC NOISE POLICY

The CDCTC noise policy for noise complaints is as follows: a complaint is routed to the range control officer, who identifies the noise source and conditions at the time of the complaint. Follow-up contact with the complainant is carried forward either through a telephone call or letter from the PAO. Every effort is made to schedule noisy training activities in temporal periods of least impact (i.e., daytime and weekday hours). Sensitive areas with respect to noise are the same as those listed for air quality (see **Section 3.3.1** and **Figure 6**).

3.5 TOPOGRAPHY, GEOLOGY, AND SOILS

The BMTA lies primarily on the northwestern slopes of the Briery Mountains. The topography consists of a rolling upland plateau with an elevation range between 1,900 and 2,800 feet above sea level (asl). Slopes on the area range from 0 to 30 percent.

The 3,797-acre CDCTC is located within the Appalachian Plateaus Geomorphic Province, which extends over most of West Virginia, more than one-half of Pennsylvania, and small parts of westernmost Virginia and Maryland (United States Geological Survey [USGS], 1999). Bedrock at the site consists of the Pottsville formation of Pennsylvanian age. Available information indicates the Pennsylvanian bedrock in this portion of West Virginia is composed of cyclic sequences of sandstone, clay, shale, coal, and limestone (WVGES, 1968).

Soils within the proposed LFBF, HGFR, and MK 19 range construction footprints are summarized in **Table 6** and **Figure 9**. No hydric soils are located within this area. Prime farmland soils include Tilsit silt loam and Gilpin silt loam with 3 to 8 percent slopes. None of the soil components or mapping units has high erosion potential from wind. However, the majority of the soils are highly susceptible to water erosion via surface water runoff (NRCS, 2001).

⁴ Two of the five residences are not in year-round use according to information provided by WVARNG.

Table 6. NRCS Soil Map Units, Proposed Range Footprints and SDZs, Briery Mountain Training Area

Map Unit Name	Mapping Symbol	Prime Farmland	Hydric	Erosion (Water)
Buchanan loam, 8-15 percent slopes, extremely bouldery	BxC	No	No	Severe
Clymer loam, 15-25 percent slopes, very stony	CID	No	No	Severe
Clymer loam, 25-35 percent slopes, very stony	CIE	No	No	Very severe
Clymer loam, 35-50 percent slopes, very stony	CIF	No	No	Very Severe
Gilpin silt loam, 3-8 percent slopes	GIB	Yes	No	Moderate
Gilpin silt loam, 8-15 percent slopes	GIC	No	No	Severe
Gilpin silt loam, 8-15 percent slopes, very stony	GsC	No	No	Severe
Gilpin silt loam, 15-25 percent slopes	GID	No	No	Severe
Laidig gravelly loam, 15-25 percent slopes, extremely bouldery	LbD	No	No	Severe
Lily channery loam, 8-15 percent slopes, very stony	LsC	No	No	Severe
Lily-Rock outcrop-Buchanan complex, moderately steep, rubbly	LxE	No	No	Severe
Shouns-Macove-Cateache complex, 35-65 percent slopes, very stony	SmF	No	No	Very severe
Tilsit silt loam, 3-8 percent	TIB	Yes	No	Severe
Source: NRCS, 2001				

3.6 WATER RESOURCES

3.6.1 SURFACE WATERS

The CDCTC is located in the Cheat River basin, which flows into the Lower Monongahela River. The Cheat River is a major tributary within this basin, with an approximate 1,420-square-mile drainage area. Stamping Ground Run, a tributary of the Cheat River, bisects the BMTA. The two forks that make up Stamping Ground Run flow northwest through the BMTA before exiting the site. Small, steep, perennial and intermittent streams are also common within the BMTA (see **Figure 7**). Approximately 6.5 miles of stream length was delineated as R4SB (riverine, intermittent streambed) during the CDCTC planning level survey within the BMTA (Mauney et al., 2001). Waters were classified using the USFWS nomenclature (Cowardin et al., 1979).

The proposed HGFR, LFBF, and MK 19 range is located on a ridge line. The elevation along the ridge line is approximately 2,700 feet asl. A small ephemeral stream is located in the vicinity of the proposed MK 19 range and the HGFR (Preferred Alternative) and LFBF (Build Alternative) footprints. One wetland, approximately 0.37 acres, occurs within the north central portion of the MK 19 range SDZ as shown in **Figure 7**.

Regulatory agencies such as the USGS and the WVDEP monitor water quality in the Cheat River watershed. Polluted Coal Mine Drainage (PCMD) is the major impact to this watershed.

The portion of the Cheat River bisecting the CDCTC Cantonment Area is heavily contaminated by PCMD, characterized by low pH and the presence of metals (AMEC, 2007). Stamping Ground Run had normal parameter values indicating this portion of the watershed has not been impacted by PCMD (National Research Center for Coal and Energy, 2002). The streams on the BMTA appear to be of higher quality in relation to surrounding area surface waters.

The CDCTC obtains its potable water from a municipal connection made to the City of Kingwood. The City of Kingwood draws water from the Cheat River and treats it prior to distributing it for domestic and commercial purposes.

3.6.2 FLOODPLAINS

The BMTA consists of higher elevations and mountainous terrain; thus, it is not located within the 100- or 500-year floodplain.

3.6.3 WETLANDS

A jurisdictional wetland survey of the BMTA was conducted in the summer of 2006 (Anderson et al, 2006). Twelve wetlands were delineated, comprising 0.89 acres. Most of these areas are a result of logging roads created in 1994 and 1995 by AWP. Wetland types include palustrine emergent (PEM) and palustrine scrub-shrub (PSS) (see **Figure 7**). These wetlands do not occur within the proposed construction footprints.

3.6.4 GROUND WATER

Regionally, water-yielding rocks are sandstones, with well yields from 5 to 400 gallons per minute. Coal beds and seams also store and transmit water because they are commonly fractured. Devonian siltstone, shale, and thin-bedded sandstone locally yield sufficient water for domestic supplies, especially where the rocks are fractured. Most of the groundwater moves through local or intermediate-scale flow systems. No regional flow occurs. Underground coal mining disturbs the natural groundwater flow system by creating new fractures that increase permeability and alter direction of flow. Approximately 47 percent of groundwater is withdrawn for domestic and commercial supplies, and about 41 percent is pumped for industrial, mining, and thermoelectric power purposes (mostly coal mining operations). The remainder is used for public water supply and agriculture (Trapp & Horn, 1997). The CDCTC is above the Permian and Pennsylvanian aquifers.

The chemical quality of water in the freshwater parts of the bedrock aquifers of the Appalachian Plateaus Province is somewhat variable, but is generally satisfactory for municipal supplies and other purposes. Most of the water in the upper portions of the aquifers is suitable or suitable after treatment. Saline water or brine is near the surface in much of the area because circulation of fresh groundwater generally extends no more than a few hundred feet below the land surface.

Contamination from improper construction or plugging of oil and gas wells and coal mining is common. Area ground water commonly includes water that has been in contact with mine activities or that has infiltrated and leached mine spoil piles. Water affected by coal-mining operations is usually acidic. The acid water commonly contains large concentrations of iron, manganese, sulfate, and dissolved solids, and is highly colored (Trapp & Horn, 1997).

3.7 BIOLOGICAL RESOURCES

3.7.1 FLORA

A baseline floristic survey of the CDCTC was conducted by the West Virginia Natural Heritage Program (WVNHP) during the 2000 growing season, and updated in the summer 2005 and spring 2006 (Streets, 2006; Streets, 2001). A total of 603 plant species were identified. More than 15 percent of the flora identified was either exotic or introduced. Some of these species are invasive to the natural plant habitats found on the CDCTC. The most prevalent of these within the BMTA are Japanese stilt grass (*Microstegium vimineum*) and multiflora rose (*Rosa multiflora*). Japanese stilt grass was found on many of the old logging roads on Briery Mountain. Multiflora rose was found growing throughout the survey area, making it a possible threat to all native plant communities with the exception of closed canopy forest (Streets, 2006).

A revision of the 2000 vegetation classification was conducted during the 2005 growing season in order to map vegetation within the new land acquisitions and ensure vegetation mapping covered the newly surveyed CDCTC boundaries (Vanderhorst, 2001; Vanderhorst & Streets, 2006). Eight plant communities within the BMTA have been classified, characterized, and mapped, including seven forest communities and one herbaceous community. Vegetation communities identified during these surveys are shown in **Figure 8**, and include: mixed mesophytic forests of colluvial slopes, hemlock ravines, mixed montane hardwood forest, sub-xeric oak forest, xeric oak/evergreen heath forest, forest seeps, successional tulip poplar forests, and old fields. Additional information on these plant communities may be found in the *Vegetation Classification and Mapping of Camp Dawson Army Training Site, Preston County, West Virginia: Second Approximation* (Vanderhorst and Street, 2006), which is available in the CDCTC Natural Resources Office.

Under its lease agreement with WVARNG, Allegheny Wood Products harvests timber from BMTA. In 2012, Allegheny Wood Products, while performing harvesting operations on other areas of the BMTA per the timbering agreement, removed mixed montane hardwood forest timber in the area where the MK 19 range was proposed. Timber was removed via the existing access trail. The potential areas for the LFEB and HGFR were not cleared at this time.

3.7.2 FAUNA

The West Virginia University Wildlife and Fisheries Resources Program conducted a comprehensive 2-year faunal inventory in 2000-2001 and again in 2006 at the CDCTC. Surveys targeting the avian, small mammal, and herpetofauna communities were conducted. More limited surveys also were conducted for moths, fishes, benthic invertebrates, and butterflies in 2000-2001 (Anderson & Kerns, 2006; Anderson et al., 2002).

3.7.2.1 MAMMALS

A total of 39 mammals (including bats) have been identified consisting of nine rare mammal species (see **Table 7**). Common mammal species on BMTA include: masked shrew (*Sorex cinereus*), eastern chipmunk (*Tamias striatus*), white-footed mouse (*Peromyscus leucopus*), woodland jumping mouse (*Napaeozapus insignis*), raccoon (*Procyon lotor*), whitetail deer (*Odocoileus virginianus*), Virginia opossum (*Didelphis marsupialis*), smoky shrew (*Sorex fumeus*), shorttail shrew (*Blarina brevicauda*), eastern cottontail (*Sylvilagus floridanus*), woodchuck (*Marmota monax*), deer mouse (*Peromyscus maniculatus*), redback vole

(*Clethrionomys gapperi*), meadow vole (*Microtus pennsylvanicus*), and meadow jumping mouse (*Zapus hudsonius*)⁵. Black bear (*Ursus americanus*) were also documented at the site.

Bats were surveyed using mist netting in summer 2002 and 2006. No Indiana bats (*Myotis sodalis*) were captured on the CDCTC during these studies (Mann & Brack, 2006; Schwierjohann et al., 2002). Eight bat species were observed during the 2002 and 2006 surveys, including the state rare eastern small-footed bat (*Myotis leibii*) and silver-haired bat (*Lasionycteris noctivagans*). In 2013, an acoustic and mist netting survey was conducted at the CDCTC to determine presence/absence of Indiana bats (Kruz, et. al, 2013). Potential Indiana bats were identified by bat call identification but no Indiana bats were captured. Because of the probable acoustic detection and qualitative confirmation of Indiana bats at Camp Dawson, USFWS determined that the CDCTC has the potential for Indiana bat habitat.

3.7.2.2 BIRDS

A total of 106 bird species were observed including eight rare bird species. Birds were surveyed using point count sampling within six habitat types, which included forest edge, forest interior, riparian edge, riparian interior, reclaimed mine areas, and developed areas. Common bird species on BMTA include: red-eyed vireo (*Vireo olivaceus*), wood thrush (*Hylocichla mustelina*), American redstart (*Setophaga ruticilla*), hooded warbler (*Wilsonia citrina*), eastern towhee (*Pipilo erythrophthalmus*), indigo bunting (*Passerina cyanea*), eastern wood-pewee (*Contopus virens*), American crow (*Corvus brachyrhynchos*), American robin (*Turdus migratorius*), cedar waxwing (*Bombycilla cedrorum*), chestnut-sided warbler (*Dendroica pensylvanica*), black-throated green warbler (*Dendroica virens*), black-and-white warbler (*Mniotilta varia*), ovenbird (*Seiurus aurocapillus*), common yellowthroat (*Geothlypis trichas*), scarlet tanager (*Piranga olivacea*), and rose-breasted grosbeak (*Pheucticus ludovicianus*).

The WVARNG is responsible under the Migratory Bird Treaty Act (MBTA; 16 USC §703-712), 50 CFR 21, and EO 13186 (*Responsibilities of Federal Agencies to Protect Migratory Birds*) to promote and protect migratory birds. The WVARNG reviewed the DoD Partners in Flight website for Bird Species of Concern, Bird Conservation Region No. 28 – Appalachian Mountains. Some of the species of concern identified in the Appalachian Mountains region could potentially occur in Preston County. WVARNG, working in coordination with the West Virginia Department of Natural Resources, Wildlife Diversity and Natural Heritage programs, conducts annual bird count surveys on BMTA to monitor for sensitive species.

3.7.2.3 REPTILES AND AMPHIBIANS

During the 2000-2001 and 2006 surveys, 10 reptile and 19 amphibian species were identified at the CDCTC, including 1 snake and 1 salamander considered rare in the State of West Virginia (see **Section 4.7.3**). Common reptiles at the BMTA include: eastern milk snake (*Lampropeltis triangulum triangulum*), smooth green snake (*Opheodrys vernalis*), and eastern garter snake (*Thamnophis sirtalis sirtalis*). Common amphibians include: red-spotted newt (*Notophthalmus viridescens viridescens*), redback salamander (*Plethodon cinereus*), and eastern American toad (*Bufo americanus*) (Anderson & Kerns, 2006; Anderson et al., 2002).

3.7.2.4 BUTTERFLIES AND MOTHS

During the 2000-2001 surveys, 64 of the 141 moth species observed were documented within the BMTA. No rare species were observed (Anderson et al., 2002).

⁵ Although common on BMTA, the meadow jumping mouse is listed as “vulnerable” by WVDNR (see **Table 7**)

3.7.2.5 FISH AND BENTHIC INVERTEBRATES

A total of 24 fish species and eight benthic invertebrate species were collected at the CDCTC during July and August 2000 within four ponds and nine stream sites. No fish were collected at Stamping Ground Run from the culvert on access Road 300 feet to the first fork, or in the 300-foot section of the left fork. One benthic macroinvertebrate, from the snout and bark beetle family (*Curculionidae*), was observed in Stamping Ground Run on the BMTA (Anderson et al, 2002).

3.7.3 SPECIAL STATUS SPECIES

The USFWS administers the Endangered Species Act of 1973 as amended. This law provides federal protection for species designated as federally endangered or threatened. An endangered species is "in danger of extinction throughout all or a significant portion of its range," and a threatened species "is likely to become an endangered species within the foreseeable future". Special status species are listed as threatened or endangered, are proposed for listing, or are candidates for listing by the state and/or federal government.

West Virginia does not have state threatened and endangered species legislation; therefore, the species listed as either threatened or endangered in the State are those found on the USFWS's list of federally threatened and endangered species.

Preston County is within the known range of the federally endangered Indiana bat (*Myotis sodalis*), the federally threatened Cheat three-tooth land snail (*Triodopsis platysayoides*), and the federally endangered running buffalo clover, (*Trifolium stoloniferum*). The BMTA does not contain habitat for the land snail (AMEC, 2007).

Mist net surveys for bats were conducted in 2002 and 2006. No endangered or threatened bats were observed during these surveys (Mann & Brack, 2006; Schwierjohann et al., 2002). However, the presence of other *Myotis* spp. suggest that habitat in the area is suitable for the Indiana bat. These species are often caught using similar travel corridors (Schwierjohann et al., 2002). In 2013, an acoustic and mist net survey was conducted following the protocol outlined in the Draft Indiana Bat Recovery Plan and 2013 Revised Range-wide Indiana Bat Summer Survey Guidelines (Kruz, et. al, 2013). Potential Indiana bats were identified by bat call identification but no Indiana bats were captured. Based on this survey, the USFWS concurred that there is a high likelihood of presence of Indiana bat and candidate species northern long-eared bat (*Myotis septentrionalis*) at the CDCTC.

Running buffalo clover has been observed on the northern portion of the Volkstone TA and the southeastern edge of the BMTA, and is a known federally listed species to occur within the CDCTC (**Figure 8**).

In addition to federally listed species, rare species are assigned State Ranks by the WVNHP and Global Ranks by NatureServe. These ranks are based on the species' documented occurrences and distributions. Other factors, such as habitat and threats to existing populations, may affect these rankings. Species with state ranks of S1, S2, or S3 are tracked by the WVNHP. A total of 25 rare species observed at the CDCTC have a state rank of S1, S2, or S3 (see **Table 7**).

Common Name	Genus/Species	Global Status	State Status	Federal Status
BIRDS				
Alder flycatcher	<i>Empidonax alnorum</i>	G5	S3B,	-
Cliff swallow	<i>Petrochelidon pyrrhonota</i>	G5	S3B	-
Golden-winged warbler *	<i>Vermivora chrysoptera</i>	G4	S2B	-
Great-blue heron	<i>Ardea herodias</i>	G5	S3B, S4N	-
Spotted sandpiper	<i>Actitis macularia</i>	G5	S3B	-
Swainson's thrush	<i>Catharus ustulatus</i>	G5	S3B	-
Yellow-bellied sapsucker *	<i>Sphyrapicus varius</i>	G5	S1B, S3N	-
PLANTS				
Appalachian sedge	<i>Carex appalachica</i>	G4	S2	-
Butternut	<i>Juglans cinera</i>	G4	S3	-
Glomerate sedge	<i>Carex aggregata</i>	G5	S2	-
Red pine	<i>Pinus resinosa</i>	G5	S1	-
Running buffalo clover	<i>Trifolium stoloniferum</i>	G3	S2	LE
Four-flowered loosestrife	<i>Lysimachia quadrifolia</i>	G5?	S1	-
REPTILES/AMPHIBIANS				
Timber rattlesnake	<i>Crotalus horridus</i>	G4	S3	-
Northern red salamander *	<i>Pseudotriton ruber</i>	G5	S3	-
MAMMALS				
Allegheny woodrat	<i>Neotoma magister</i>	G3G4	S3	-
Eastern small-footed bat	<i>Myotis leibii</i>	G3	S1	-
Long-tailed shrew *	<i>Sorex dispar</i>	G4	S2S3	-
Meadow jumping mouse *	<i>Zapus hudsonius</i>	G5	S3	-
Silver-haired bat	<i>Lasionycteris noctivagans</i>	G5	S2	-
Southern bog lemming	<i>Synaptomys cooperi</i>	G5	S2	-
Southern pygmy shrew	<i>Sorex hoyi winnemana</i>	G5T4	S2S3	-
Southern rock vole	<i>Microtus chrotorrhinus carolinensis</i>	G4G3	S2	-
Star-nosed mole	<i>Condylura cristata</i>	G5	S2	-
FISH				
Bluebreast darter	<i>Etheostoma camurum</i>	G4	S3	-
FEDERAL STATUS		STATE RANK DEFINITIONS		
E = Endangered = Endangered throughout range		Basic Rank		
T = Threatened = Threatened throughout range		S1 = Critically imperiled		
		S2 = Imperiled		
		S3 = Vulnerable		
		S4 = Apparently secure		
		S5 = Secure		
		S#S# = Numeric range rank: A range between two of the ranks that denotes a range of uncertainty about the exact rarity of the species.		
		SH = Historical (not observed within last 20 years)		
		B = Breeding population		
		N = Non-breeding population		
		? = Rank uncertain		
GLOBAL RANK DEFINITIONS				
Basic Rank:				
G1 = Critically imperiled				
G2 = Imperiled				
G3 = Vulnerable				
G4 = Apparently secure				
G5 = Secure				
? = Rank Uncertain				
* Observed within the BMTA				
Source: Simcoe, 2005; WVNHP, 2007				

3.8 CULTURAL RESOURCES

3.8.1 OVERVIEW

Cultural resources are “historic properties” as defined by the NHPA, “cultural items” as defined by the NAGPRA, “archaeological resources” as defined by the Archaeological Resources

Protection Act (ARPA), “sacred sites” as defined by EO 13007 to which access is afforded under the American Indian Religious Freedom Act (AIRFA), and collections and associated records as defined by 36 CFR 79. NEPA requires consideration of “important historic, cultural, and natural aspects of our natural heritage.” Consideration of cultural resources under NEPA includes the necessity to independently comply with the applicable procedures and requirements of other federal and state laws, regulations, EOs, presidential memoranda, and ARNG guidance.

The principal federal law addressing cultural resources is the NHPA of 1966, as amended (16 USC Section 470), and its implementing regulations (36 CFR 800). The regulations, commonly referred to as the Section 106 process, describe the procedures for identifying and evaluating historic properties; assessing the effects of federal actions on historic properties; and consulting to avoid, reduce, or minimize adverse effects. As part of the Section 106 process, agencies are required to consult with the SHPO. The term “historic properties” refers to cultural resources that meet specific criteria for eligibility for listing on the National Register of Historic Places (NRHP); historic properties need not be formally listed on the NRHP. Section 106 does not require preservation of historic properties, but ensures decisions of federal agencies concerning treatment of these places result from meaningful considerations of cultural and historic values and of the options available to protect the properties. The Proposed Action is an undertaking as defined by 36 CFR 800.3, and is required to comply with the requirements of Section 106.

Archaeological resources on federal lands are protected under the ARPA Public Law 96-95. Native American human remains, burials, and associated burial goods on federal lands or federally controlled lands are protected under Section 3 (c) of the NAGPRA, Public Law 101-601, and its implementing regulations (43 CFR Part 10). These regulations also require Federal officials to take reasonable steps to determine whether a planned activity may result in the excavation of human remains, funerary objects, sacred objects, or objects of cultural patrimony from Federal lands (43 CFR Part 10.3(c)(1)).

The DoDI 4710.02 (*DoD Interactions with Federally Recognized Tribes*) provides guidance for interacting and working with federally recognized American Indian and Alaska Native governments or tribes. This Instruction implements *Annotated DoD American Indian and Alaska Native Policy* (27 Oct 99), which governs compliance with EO 13175 (Consultation and Coordination with Indian Tribal Governments) and Presidential Memoranda for *Heads of Executive Departments and Agencies on Government-to-Government Relations with Native American Tribal Governments* (29 April 1994). The DoD policy outlines DoD trust obligations, communication procedures with tribes on a government-to-government basis, consultation protocols, and actions to recognize and respect the significance that tribes ascribe to certain natural resources and properties of traditional cultural or religious importance. The policy requires consultation with federally recognized tribes for proposed activities that could significantly affect tribal resources or interests.

In addition to Federal and State regulatory laws and policies, an Integrated Cultural Resources Management Plan (ICRMP) was developed by the WVARNG that forms the basis for cultural resources management on BMTA. An ICRMP is required by DoDI 4715.3, *Environmental Conservation Program*, and fulfills the requirements as stipulated within and AR 200-1, *Environmental Protection and Enhancement*.

The WVARNG’s ICRMP establishes explicit responsibilities, standard operating procedures (SOP), and long-range goals for managing cultural resources in compliance with all applicable laws and regulations, while ensuring the safety, efficiency, and attainment of Federal and state

missions. SOP Number 5 of the ICRMP establishes procedures to be followed in case of inadvertent discovery of cultural items.

3.8.2 SIGNIFICANCE CRITERIA

In order for a cultural resource to be considered significant, it must meet one criterion or more for inclusion on the NRHP, as described below:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association; and: a) that are associated with events that have made a significant contribution to the broad patterns of our history; or b) that are associated with the lives or persons significant in our past; or c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or d) that have yielded, or may be likely to yield, information important in prehistory or history (36 CFR 60:4).

Only significant cultural resources warrant consideration with regard to adverse impacts resulting from implementation of a Proposed Action. Generally, cultural resources must be more than 50 years old to receive protection under Federal laws.

3.8.3 ARCHITECTURAL RESOURCES

An architectural historic survey was conducted for 17 structures located in Camp Dawson that were over 50 years of age. These structures were recommended not to be eligible for NRHP listing either individually or as a historic district because they fail to retain the historic feel, association, and in certain cases, material integrity associated with Camp Dawson's period of significance. The survey determined that no buildings over 50 years of age existed on the Volkstone TA, Briery Mountain TA, or the Pringle Tract. Therefore, no architectural historic survey was conducted on these TAs (Simpson and Scherer, 2006).

3.8.4 ARCHAEOLOGICAL RESOURCES

Recent archaeological research includes a Planning Level Survey (Anderson, 1998), a Phase I archaeological investigation of the entire BMTA (Simpson, 2007), and completion of a cultural sensitivity model (Simpson and Scherer, 2006). During the course of this investigation, 15 archaeological sites were documented. Site types include rock shelters, prehistoric lithic scatters, and historic homesteads. Eleven of the fifteen sites were determined to not be eligible for inclusion to the National Register of Historic Places. Four of the remaining sites, including three prehistoric rockshelter occupations, Sites 46PR90, 46PR93, and 46PR97; and an early historic farmstead, 46PR100, were recommended for additional investigation to determine eligibility for listing on the NRHP. The WVSHPO concurred with this determination only if the activities of the Proposed Action could not avoid these sites. If avoidance is not possible, then a Phase II Investigation would be necessary. The WVSHPO concurrence letter dated 6 December 2007 is provided in **Appendix B**. In a letter from the WVSHPO dated 26 February 2009 responding to a request for updated files or issues concerning the Proposed Action, the WVSHPO stated that no new files or issues were found. The WVSHPO asked that sites 46PR90, 46PR93, 46PR97, and 46PR100 continue to be avoided by activities associated with the development of the proposed firing ranges. The WVSHPO letter is provided in **Appendix B**. 46PR90, one of the four identified archaeological sites with potential eligibility for NRHP listing,

is located within the SDZ of the MK 19 range, approximately 1,900 meters from the firing line. Additional follow up with the WVSHPO occurred in a letter dated 20 June 2014. The WVSHPO concurrence letter dated 22 July 2014 determined that the Proposed Action will have no adverse effect on historic properties. WVSHPO did request that WVARNG periodically check site 46PR90 to ensure it has not been affected by training exercises and that WVARNG notify WVSHPO if damage to the site is discovered (see **Appendix B**).

No historic cemeteries were identified in the BMTA (Simpson and Scherer, 2007).

3.8.5 NATIVE AMERICAN CONSULTATION

There are no recorded federally recognized Native American traditional or sacred sites, as defined by the AIRFA of 1978, at the CDCTC at this time. The WVARNG is conducting formal consultation with federally recognized Native American tribes as required under DoDI 4710.02. During this process, the WVARNG has considered the *Annotated DoD American Indian and Alaska Native Policy*, EO 13175, and AR 200-1. The following five federally recognized tribes were identified as having potential ancestral ties to the CDCTC area: the Seneca Nation of Indians, the St. Regis Mohawk Tribe, the Absentee Shawnee Tribe of Oklahoma, the Delaware Tribe of Indians, and the Eastern Band of Cherokee Indians. These entities were invited by the WVARNG to participate as Sovereign Nations per EO 13175 (Consultation and Coordination with Indian Tribal Governments). Consultations with these tribes were conducted in accordance with the protocol set forth in the NGB NEPA Handbook. In a letter dated 28 January 2009, the St. Regis Mohawk Tribe responded to the request for consultation. The St. Regis Mohawk Tribe stated that the project is outside their area of consultation. The St. Regis Mohawk Tribe requested that if any human remains, funerary objects, sacred objects, or objects of cultural patrimony are encountered, they be notified immediately and all construction/investigations cease until concerns of all parties are addressed. A follow up letter was sent on 24 March 2014 to the tribes describing the status of the project and that the urban assault course had been replaced by the MK 19 range in the Proposed Action. No responses were received from the tribes to this follow up letter. Copies of letters submitted to these federally recognized Native American tribes and their responses are included in **Appendix B**. A MFR is included in **Appendix E**.

3.9 SOCIOECONOMICS

The following subsections identify and describe the socioeconomic environment surrounding the CDCTC. Presented data provide an understanding of the socioeconomic factors that have developed the area. Socioeconomic areas of discussion include the local demographics, regional and local economy, local housing, and local recreation activities. Data used in preparing this section was collected from the U.S. Census Population and Housing (U.S. Census Bureau, 1990, 2000, 2008, and 2010) and the Bureau of Labor (2010), and Preston County Board of Education (BOE) (2009). Currently, the overall population of the state of West Virginia in 2010 is 1,852,994, indicating a 2.4 percent rate of increase from 1,808,344 in 2000 (U.S. Census Bureau, 2010c).

3.9.1 POPULATION

The population of Preston County was 29,334 in 2000 and 33,520 in 2010 – an increase of 12.4 percent. The City of Kingwood had a population of 2,944 in 2000 and 2,939 in 2010 – a decrease of 0.1 percent. As indicated in **Section 4.9**, the state of West Virginia had an overall increase of 2.4 percent, less than the overall 8.8 percent increase in U.S. population over the 2000 to 2010 period (U.S. Census Bureau, 2000 and 2010). According to the U.S. Census

Bureau, 2008 Population Estimates, Preston County had a population of 30,285, ranking 18th in the state. The City of Kingwood had a population of 2,947 in 2008 indicating little to no population change over the past 8 years in the area immediately surrounding the CDCTC (U.S. Census, 2008). Regional demographic information at the city, county and state levels is presented in **Table 8**.

Area	All Individuals	White (%)	African-American (%)	American Indian and Alaska Native (%)	Asian (%)	Other Race (%)	Hispanic or Latino* (%)
State of West Virginia	1,852,994	93.9	3.4	0.2	0.7	0.3	1.2
Preston County	33,520	97.6	1.1	0.2	0.1	0.2	0.7
Kingwood City	2,939	97.3	0.9	0.1	0.5	0.1	0.5
* Persons of Hispanic or Latino origin may be of any race							
<i>Source:</i> U.S. Census Bureau, 2010a, U.S. Census Bureau, 2010b, U.S. Census Bureau, 2010c.							

3.9.2 REGIONAL ECONOMY

Civilian labor force in 2000 was 12,937 in Preston County and 1,393 in Kingwood City. Unemployment rates were similar within Kingwood, Preston County, and West Virginia in 2000. These rates were only slightly higher than the overall U.S. unemployment rate of 3.7 percent in 2000. Unemployment rates in May 2010 were much higher in comparison to the 2000 rates within the county, state and overall U.S. The State of West Virginia had an unemployment rate of 8.9 percent, which was slightly less than the overall U.S. rate of 9.3 percent. In May 2010, Preston County had an unemployment rate of 6.9 percent, which was the 4th lowest out of 54 counties in West Virginia (Bureau of Labor, 2010). Regional economic information is provided in **Table 9**.

Based on regional income data, household incomes within West Virginia are approximately 29 percent lower than the overall U.S., and poverty rates are higher. The State and City of Kingwood have similar household incomes, while Preston County's median household and per capita incomes are slightly lower. However, poverty rates were higher within the City and Preston County in comparison to the overall State.

Table 9. Regional Income and Employment Information

Area	Number of Households	Median Household Income (\$)	Per Capita Income (\$)	Population Below Poverty Level (%)	Unemployment (%)	
					2000	May 2010
U.S.	105,539,122	\$41,994	\$21,587	12.4	3.7	9.3
State of West Virginia	737,360	\$29,696	\$16,477	13.9	4.0	8.9
Preston County	11,551	\$27,927	\$13,596	14.7	3.8	6.9
Kingwood City	1,256	\$29,155	\$16,299	16.3	4.1	--

Source: U.S. Census Bureau, 2000; Bureau of Labor, 2010

The top four industry types in the region are: (1) educational, health and social services, (2) retail trade; (3) manufacturing; and (4) public administration. These industries employ approximately 61 percent of the civilian labor force in Kingwood. The educational, health, and social services employment sector employs nearly 30 percent. Approximately \$83 million was made by Kingwood industries in 2000 (U.S. Census Bureau, 2000).

The CDCTC provides full time permanent employment to about 40 personnel and temporary employment (a few weeks to 12 months) to about 15 personnel. CDCTC provides annual support for approximately 103,000 Soldier-days of training on average for National Guard, reserve, and active component troops, along with approximately 60,000 Soldier-days on average for non-DoD agency training. CDCTC has the capability to billet and support one battalion-size unit. In addition, there are enough bivouac sites to accommodate multiple battalion level operations. During the summer, troops conducting annual training use the facilities for 10 to 15 days at a time, with a fluctuation of troops at CDCTC for the remainder of the summer. This training occurs intermittently throughout the year. However, most training takes place on weekends.

3.9.3 HOUSING

According to data from the 2010 Census Bureau, 1,454 housing units were present in Kingwood. Of these, approximately 89 percent were occupied, which included about 68 percent owner-occupied and 32 percent renter-occupied. Approximately 15 percent of housing units are classified as vacant units (U.S. Census Bureau, 2010). The median value of owner-occupied units in 2000 was \$68,600, and the median monthly gross rent was \$321 (U.S. Census Bureau, 2000). Regional housing information is provided in **Table 10**.

Table 10. Regional Housing Characteristics

Area	Housing Units Available	Occupied (%)	Owner-Occupied (%)	Median Value*	Renter-Occupied (%)	Median Gross Rent*
State of West Virginia	881,917	86.6	73.4	72,800	26.6	401
Preston County	15,097	85.4	81.7	63,100	18.3	336
Kingwood City	1,454	88.8	68.3	68,600	31.7	321

Source: U.S. Census Bureau, 2000, U.S. Census Bureau, 2010

Note:
*Current 2010 U.S. Census data was not yet available for all population and housing information. 2000 U.S. Census Bureau data was used for the median value and median gross rent.

3.9.4 SCHOOLS

No schools are in the vicinity of the BMTA. The Preston County public school system consists of five K-5 grade elementary schools, three K-8 grade elementary/middle schools, three 6-8 grade middle schools, and one high school. The county also has one private school. Enrollment during 2009-2010 was 4,646 students (Preston County Board of Education, 2009). **Table 11** provides 2000 statistics of educational attainment for persons 25 years and older for areas peripheral to the CDCTC.

Area	No Diploma (%)	High School Graduates (%)	Post-Secondary Graduates (%)
State of West Virginia	24.8	75.2	14.8
Preston County	26.0	74	10.8
Kingwood	18.4	81.6	21.8

Source: U.S. Census Bureau, 2000

3.9.5 SHOPS AND SERVICES

No shops or services exist within the BMTA or within close proximity to its property boundary. Local shops and services for WVARNG personnel exist within the CDCTC Cantonment Area's Regional Training Institute (RTI) building (e.g., barber shop, sundries shop, snack bar, and cafeteria). In addition, retailers in Kingwood and other local communities provide local shopping and services for area residents and WVARNG personnel.

3.9.6 RECREATIONAL FACILITIES

The BMTA is open to the public for hunting when not being used for military training through a cooperative agreement with the WVDNR – Wildlife Resources Section, and is known as Briery Mountain WMA (**Appendix A**). Hunting is permitted in accordance with state seasons and regulations set forth by the WVARNG. Camping and open fires are not permitted on the training site. Several roads and jeep trails provide vehicular access throughout BMTA. The use of All Terrain Vehicles is prohibited except where permitted by posted signs on designated roads and trails. On average, 250 public and 50 guardsman permits are issued on a yearly basis.

A portion of the Allegheny Trail traverses the BMTA. The Allegheny Trail is a 330-mile north-south trail that starts at the Pennsylvania-West Virginia border near Bruceon Mills and ends at the Appalachian Trail on Peters Mountain at the Virginia-West Virginia border. The trail was initiated in 1975, and traverses a combination of public and private lands. Volunteer workers from the West Virginia Scenic Trails Association maintain all sections of the Allegheny Trail with occasional assistance from the U.S. Forest Service. No usage data is kept. The WVARNG is working with the West Virginia Scenic Trails Association to reroute the Trail.

3.9.7 PUBLIC AND OCCUPATIONAL HEALTH AND SAFETY

Public safety and enforcement of laws and regulations are provided primarily by Post Operations and camp security. The RTI also provides this service when staff is present, which is usually only during selected training events. However, local law enforcement, conservation officers, and fire departments maintain jurisdiction in the BMTA, as this area is considered a WMA and open to the public when there are no conflicts with training missions.

Local law enforcement within the vicinity of the BMTA includes the Preston County Sheriff's Department. Emergency 911 services are administered through the Preston County Sheriff's Department. The Kingwood Voluntary Fire Department supplies local emergency support for the general area.

Preston Memorial Hospital in Kingwood is the nearest hospital to the BMTA for local residents and WVARNG personnel. A medical clinic for WVARNG personnel is available within the CDCTC proper.

3.9.8 PROTECTION OF CHILDREN

Because children may suffer disproportionately from environmental health risks and safety risks, EO 13045 (Protection of Children from Environmental Health Risks and Safety Risks) was introduced on 21 April 1997. EO 13045 was intended to prioritize identification and assessment of environmental health risks and safety risks that may affect children and ensure Federal agencies' policies, programs, activities, and standards address environmental risks and safety risks to children.

Currently, there are seldom children present at the BMTA as visitors, and no children reside at the installation. No other child care centers, schools, parks, or other concentrations of children exist on or within the immediate vicinity of the proposed ranges.

3.10 ENVIRONMENTAL JUSTICE

EO 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations), dated 11 February 1994, requires Federal agencies to identify and address disproportionate adverse effects of their programs, policies, and activities on minority and low-income populations. Potential environmental justice considerations are determined by

comparing demographic and economic characteristics (minority population composition and poverty rates) within the study area to the same characteristics in the surrounding region.

3.10.1 GEOGRAPHIC DISTRIBUTION OF MINORITY POPULATIONS

No minority populations exist on CDCTC property or immediately adjacent to the CDCTC. The term “minority population” includes persons who identify themselves as African American, Asian or Pacific Islander, Native American or Alaska Native, or Hispanic. A minority population exists where the percentage of minorities in an affected area either exceeds 50 percent or is meaningfully greater than in the general population of the large surrounding area. Based upon the 2010 U.S. Census, Preston County is comprised of 2.4 minorities (see **Table 8**), which is lower than the State of West Virginia with 6.1 percent minorities. Preston County is not considered a minority population area.

3.10.2 GEOGRAPHIC DISTRIBUTION OF LOW-INCOME POPULATIONS

The Census Bureau defines a “poverty area” as a Census tract where 20 percent or more of the residents have incomes below the poverty threshold and an “extreme poverty area” as one with 40 percent or more below the poverty level. In 2000, Preston County’s poverty rate was estimate at 18.3 percent, compared to the West Virginia poverty estimate of 17.9 percent. According to the U.S. Census Bureau’s American Community Survey (2006-2008), the county poverty rate is currently estimated to be approximately 17.0 percent, which is similar to the 2000 estimate. Therefore, Preston County does not meet the definition of a poverty area at this time.

3.11 INFRASTRUCTURE

Infrastructure resources include potable water supply, wastewater treatment, solid waste disposal, energy sources, and transportation systems.

The CDCTC obtains its potable water supply from Kingwood Water Works and its wastewater treatment through Kingwood Sanitary Sewer Works. No service is provided to the BMTA. The City of Kingwood also provides solid waste disposal.

The Monongahela Power Company provides electricity to the CDCTC, including the BMTA. The Mountaineer Gas Company, which is a division of Allegheny Power, provides gas services to the CDCTC, while Verizon provides telecommunications services. These services are not provided to the BMTA.

3.12 TRANSPORTATION

Major interstates within the vicinity of the installation include I-68 and I-79. I-68 runs east-west, while I-79 runs north-south through the state of West Virginia. SR 7 runs northeast from Kingwood and intersects with I-68 in Morgantown, while County Route (CR) 26 runs north-south and intersects I-68 near Bruceton Mills. These roads intersect in the center of Kingwood (**Figure 1**).

Access to the BMTA is relatively poor because most roads in the vicinity of the CDCTC are one-lane county roads. Access to the site is provided by Whetzell Settlement Road. This road intersects SR 7 approximately 1.5 miles east of Kingwood. The former CR 86-4 (abandoned) and several steep dirt trails provide vehicular access within the BMTA. A gravel access road connects the former CR 86-4 to the MRFR support area (**Figure 3**).

A Baltimore and Ohio Railroad right-of-way runs parallel to the West Virginia SR 72 right-of-way. Both rights-of-way bisect the Volkstone TA.

The nearest large-scale commercial airport is the Morgantown Municipal-Hart Field in Morgantown, West Virginia. Preston County has five small airports, including Moore Field in Kingwood, West Virginia. A heliport with refueling capabilities is located within the CDCTC Cantonment Area.

3.13 HAZARDOUS AND TOXIC MATERIALS/WASTES

Hazardous and toxic materials or substances are generally defined as materials or substances that pose a risk (through either physical or chemical reactions) to human health or the environment. Regulated hazardous substances are identified through a number of federal laws and regulations. The most comprehensive list is contained in 40 CFR 302, and identifies quantities of these substances that, when released to the environment, require notification to a Federal government agency. Hazardous wastes, defined in 40 CFR 261.3, are considered hazardous substances. Generally, hazardous wastes are discarded materials (solids or liquids) not otherwise excluded by 40 CFR 261.4 that exhibit a hazardous characteristic (i.e., ignitable, corrosive, reactive, or toxic), or are specifically identified within 40 CFR 261. Petroleum products are specifically exempted from 40 CFR 302, but some are also generally considered hazardous substances due to their physical characteristics (especially fuel products), and their ability to impair natural resources.

Vehicle maintenance operations at the CDCTC generate very small quantities of hazardous waste consisting primarily of petroleum, oil, lubricants, used filters, and limited solvents. No Underground Storage Tanks occur at CDCTC, and no pesticides are stored at the Post.

SECTION 4. ENVIRONMENTAL CONSEQUENCES

This section identifies potential direct, indirect, and cumulative effects and compares and contrasts the effects of implementing the Preferred Action Alternative (also known as the Proposed Action) or No Action Alternative as well as Best Management Practices (BMPs) that would reduce the level of identified impacts. The WVARNG considers BMPs integral to implementation and are not considered separate from the Proposed Action. Mitigation measures are identified that, when implemented, would reduce the level of identified impacts to acceptable, *less-than-significant* levels. Significance criteria for NEPA subject areas used during alternative analysis are included as **Appendix C**.

4.1 LAND USE

4.1.1 PREFERRED ACTION ALTERNATIVE (ALTERNATIVE B)

Land use would change under the Preferred Action Alternative. Under the Preferred Action Alternative, *no significant adverse effects* to on- or off-post land use or land cover would be anticipated.

The Preferred Action Alternative analyzed in this EA would likely result in *long-term positive* land use impacts within the BMTA. The Preferred Action Alternative would be consistent with existing, adjacent land uses. This would therefore result in *minor, long-term positive* land use impacts by improving the training use, capability, and value of these areas.

Implementation of the Preferred Action Alternative would facilitate and enhance existing training activities at the CDCTC. Land use impacts would be minimal and would be similar in nature to existing conditions. Dust from construction is unlikely to impact off-Post areas because the BMTA is relatively isolated and forested. No conflict with existing or proposed off-Post land use management plans or zoning is anticipated. No on-Post land use impacts are anticipated, as components of the Preferred Action Alternative have been specifically sited to maximize the training value and use of the installation without use conflicts.

Implementation of the Preferred Action Alternative is not anticipated to produce significant indirect impacts to off-Post land uses. No need for additional off-Post housing or increase in permanent occupancy of areas adjacent to the installation is anticipated. The services required to support this training increase would be provided by existing or planned infrastructure and land uses. Night lighting at the proposed ranges occasionally required for training would not affect adjacent land uses. This alternative would make use of existing logging roads for access, limiting the need for new roads. Existing vegetation and the distance to off-post land uses (residences) would attenuate the light. Potential noise impacts to off-Post land uses are discussed in **Section 4.4.1**.

The CDCTC mission to provide sufficient lands to support required military training would be achieved under the Preferred Action Alternative. The Preferred Action Alternative would require modification of up to approximately 20.82 acres to develop the proposed ranges and indirect designation of an additional 351 acres as range SDZs on a temporary basis when the ranges are in operation. When the ranges are not in operation, these SDZ areas would be available for other training uses. All proposed SDZs are located within the BMTA boundaries. Implementation of the Preferred Action Alternative is generally consistent with existing, on-Post land uses (i.e., military training). Under the Preferred Action Alternative, on-Post building function and architecture impacts are not anticipated; historic context issues related to this area are addressed in **Section 5.8**.

Based on an examination of conceptual designs for the proposed ranges at the BMTA, approximately 20.82 acres located within the range footprints would be directly disturbed. Disturbance, in the form of land cover changes, would occur at the firing points, target/berm locations, ROCA facilities, access roads, and parking areas. Lines of sight (LOSs) from the firing lines to the targets would also need to be achieved via clearing, where appropriate. The WVARNG would minimize clearing and earthwork to the maximum extent possible to minimize disturbance and associated construction costs. Disturbed areas would generally be converted from the current condition to improved surfaces (for structures, parking areas, and roads) and grassland. Therefore, from a land cover perspective, the Preferred Action Alternative effectively would modify approximately 20.82 acres of land within the BMTA. The majority of this land would be modified from forest/open field to grassland. Given the limited amount of clearing relative to the total land area of the CDCTC, coupled with the fact that nearly all of these areas have been previously disturbed (e.g., logging), the impact to land cover would be negligible. In addition, conversion of forested areas to grassland areas would increase habitat diversity within the BMTA. Grasslands are currently the most limited upland habitat type within the BMTA.

No land cover changes are anticipated within the SDZs as result of the Preferred Action Alternative. The majority of the LFBF and MK 19 range SDZs overlap with the existing MRFR SDZ.

4.1.2 BUILD ALTERNATIVE (ALTERNATIVE A)

Impacts to land cover and land use would be similar to the Preferred Action Alternative (see **Section 5.2.1**). Range footprint impacts would be similar but there would be a slightly larger SDZ impact Under the Build Alternative. Alternative A LFBF's SDZ has less of an overlap with the existing MRFR SDZ and slightly less of an overlap with the MK 19 range SDZ.

4.1.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, the Proposed Action would not be implemented and no changes in land use or land cover would occur. However, failure to provide required training ranges would negatively impact the long-term viability of the CDCTC as a training center and its future land use, resulting in a *potentially long-term adverse* land use impact.

4.1.4 MITIGATION

None.

4.2 AIR QUALITY

4.2.1 PREFERRED ACTION ALTERNATIVE (ALTERNATIVE B)

Under the Preferred Action Alternative, *no significant adverse effects* to local or regional air quality would be anticipated.

Air emissions generated from the Preferred Action Alternative would have *less-than-significant (minor) direct, short-term and long-term adverse impacts* to the existing air quality environment around the BMTA. Implementation of this Alternative would allow additional training activities to be conducted at the BMTA with a commensurate increase in local fugitive air emissions.

Direct impacts would include minor short-term and long-term increased air emission levels as a result of: 1) construction activities; 2) operation of proposed ranges; and 3) travel to and from the ranges. Air pollutant generating sources present during construction activities would be associated primarily with standard large-scale construction equipment. A minor increase in fugitive dust and vehicular engine emissions would be expected.

No effect to sensitive receptors in the vicinity of BMTA (see **Figure 6**) is anticipated due to the proposed project locations (greater than 0.5 mile from the nearest sensitive receptor) and the overall rural nature of BMTA and the surrounding area.

WVARNG will ensure that fugitive dust control associated with construction of the proposed ranges is conducted in accordance with 45 Code of State Rules (CSR) 17 (To Prevent and Control Particulate Matter Pollution). To minimize air quality impacts, the WVARNG would implement procedures for ensuring consistent usage of the following typical dust control BMPs, as applicable:

- Use appropriate dust suppression methods during on-site construction activities, and if necessary, during dry weather training activities. Available methods include application of water (fresh water only), soil stabilizers, or vegetation; use of enclosures, covers, silt fences, or wheel washers; and suspension of earth-movement or disturbance activities during high wind conditions.
- Maintain an appropriate speed to minimize dust generated by vehicles and equipment on unpaved surfaces.
- Repair and service construction equipment according to the regular maintenance schedule recommended for each individual equipment type.
- Incorporate energy-efficient supplies whenever feasible.

The WVARNG would visually monitor all construction and operational activities within the BMTA regularly, and particularly during extended periods of dry weather. In addition, the WVARNG would ensure that operation of facilities at the BMTA anticipated to produce airborne dust is conducted using the dust control BMPs identified above to minimize potential for air quality impacts.

Anticipated emissions of lead associated with small-arms training were calculated using anticipated ammunition usage provided by WVARNG, and emission factors developed by the U.S. Army Aberdeen Test Center and compiled by USEPA in AP-42 Chapter 15, Section 15.1 (USEPA, 2006). The WVARNG expects airborne lead emissions would be less than 50 pounds per year. In addition, the BMTA would aid in attenuating potential air quality impacts, as the project area is relatively isolated and surrounded by dense forests.

The Preferred Action Alternative would not cause an exceedance of the NAAQS and would occur in an area currently in full attainment with the NAAQS. A conformity analysis is not required, and *no significant adverse impacts* to air quality would occur as a result implementing the Preferred Action Alternative.

4.2.2 BUILD ALTERNATIVE (ALTERNATIVE A)

Impacts of the proposed Build Alternative would be similar to the Preferred Action Alternative (see **Section 4.2.1**).

4.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, *no significant adverse* air quality impacts would occur.

4.2.4 MITIGATION

None.

4.3 NOISE

4.3.1 PREFERRED ACTION ALTERNATIVE (ALTERNATIVE B)

Under the Preferred Action Alternative, *less-than-significant (minor), long-term, adverse effects* to the local noise environment would be anticipated.

Implementation of the Preferred Action Alternative would increase the amount of training activities that occur at the BMTA, and would consequently increase noise-generating activities within certain of the primary noise source categories. In addition, construction of the Preferred Action Alternative would create noise during the construction phase. No schools, hotels, health care facilities, or day care centers exist within close proximity of the BMTA. Several residences (e.g., sensitive receptors) exist approximately half mile from the proposed ranges (see **Figure 6**). Given the distance between the majority of the proposed construction sites and the installation boundary, coupled with the short duration of these activities conducted during normal business hours, these construction noise impacts are anticipated to be *minor, short-term, and adverse, but less than significant*.

Construction – Construction would generally occur between the hours of 7:00 AM and 5:00 PM. No nighttime construction activity is expected. Construction activities would increase ambient noise levels. Any disturbance to wildlife from noise would be temporary.

Noise impacts would depend on distance from the construction area, type and number of pieces of equipment operating simultaneously, duration of equipment operation, and time of day. Construction equipment typically generates noise levels of 80 to 90 dBA per piece at a distance of 50 feet. Where several pieces of equipment are operating at the same time, relatively high construction noise levels can be noted at distances of 400 to 800 feet from the construction site. Significant levels of construction noise are rarely noted more than 1,000 feet from construction sites. The following BMPs would be used to limit noise impacts during short-term construction:

- Limit, to the extent possible, construction and associated heavy truck traffic between 9:00 PM and 7:00 AM. This measure would reduce noise impacts during sensitive nighttime hours.
- Shut down noise-generating heavy equipment when it is not needed.
- Maintain equipment per manufacturer's recommendations.
- Encourage construction personnel to operate equipment in the quietest manner practicable (for example, speed restrictions, air-brake restrictions, engine speed restrictions, etc.).

These noise-reducing measures would be briefed at the construction kick-off meeting. The WVARNG's on-site construction manager would be responsible to bring noise issues, if they arise, to the WVARNG for resolution.

Vehicle Use – Vehicle noise from construction traffic could be annoying to those residences in close proximity to the access route along Southgate Road and/or Whetzell Settlement Road. No residential developments occur along either of these roadways; however, single family residences are sparsely located within these corridors. The highest construction traffic noise levels would result from larger trucks and equipment climbing or reducing speed up and down hills.

Vehicle use during range operation would involve troop and equipment transport activities. Troop and equipment transport activities would occur within CDCTC boundaries and between the CDCTC and other WVARNG home unit locations. Both government and personal vehicles

would be used. Travel to the BMTA from Camp Dawson Proper would be along the same route described for construction traffic. Military vehicles could include M35 2-½-ton cargo trucks, HMMWVs, and buses. Training-related traffic increases are described in **Section 2.8**. Posted speed along this route is 35 miles per hour. Peak pass-by noise levels for various vehicles as predicted by the Federal Highway Administration Traffic Noise Model are shown in **Table 10**.

Table 11. Peak Pass-By Noise Levels for Various Vehicles at a Distance of 50 Feet

Speed (miles/hour)	Automobiles, Pickups, Sport Utility Vehicles (dBA)	2-Axle HMMWV Light Medium Tactical Vehicle (dBA)	3-Axle Truck Medium Tactical Vehicle (dBA)
15	50.7	65.3	77.0
20	55.6	68.5	79.0
25	59.4	71.0	80.5
30	62.4	73.0	81.8
35	65.0	74.7	82.9

Source: DA, 2004b

Maximum outdoor traffic-related DNL at a distance of 50 feet from the roadway during heavy training periods is estimated at between 52 and 61 dBA⁶, which would be considered compatible with residential land use. However, outdoor peak levels up to 83 dBA would occur from passing vehicles. Such transient noise levels would not cause significant noise impacts at residences during daytime hours. Depending on the individual, these noise levels could cause annoyance during nighttime hours. Indoor noise levels are typically 10-35 dBA lower than outdoor levels, depending on building and window type.

Weapons Use – The United States Army Public Health Command (USAPHC) assessed noise levels associated with proposed range operations for the BMTA in May 2009. The project area is predominately undeveloped with scattered residential land uses. MK 19 range grenade launcher noise was evaluated and the report determined that the risk of complaints from the use of an inert round (M281 MOD 1 training round) is low when the distance to a noise receptor is greater than 300 meters (see **Appendix G**). The nearest receptors are more than 1,500 meters away (see **Figures 5 and 6**). Activity from the proposed LFBBF and HGFR has the potential to generate complaints but no more so than the existing demolition activity (see **Figure 6 and Appendix G**). It is important to remember that predominantly undeveloped land generally equates to an extremely quiet ambient (background) noise environment. Thus, periods of quiet followed by periods of intense small arms firing or demolition activity may promote a greater potential for noise complaints (USACHPPM, 2009).

The WVARNG and CDCTA would abide by the recommendations outlined within the Statewide Operational Noise Management Plan and developed by the USAPHC. The WVARNG and the BMTA would continue their operational noise management and outreach programs, to inform the public of possible noise from training. The WVARNG and BMTA would continue to work with local government agencies and communities identifying potential noise and land use incompatibility and addressing possible noise issues, including restricting development of residences or other sensitive receptors within Noise Zone II.

⁶ DNL estimated based on using posted speeds, a receptor distance 50 feet from the roadway, and assuming one soldier per car, two soldiers per HMMWV, and five soldiers per cargo truck. Each automobile peak event is assumed to last 0.5 minute; HMMWV and cargo truck events are assumed to last 1.0 minutes each. This is a conservative estimate; actual levels would be lower.

4.3.2 BUILD ALTERNATIVE (ALTERNATIVE A)

Noise impacts under the proposed Build Alternative would be similar to the Preferred Action Alternative (see **Section 5.4.1**).

4.3.3 NO ACTION ALTERNATIVE

Implementation of the No Action Alternative would have no effects on the current local noise environment. Training and operations at the BMTA would continue at current locations and levels. The WVARNG would continue their public affairs program regarding noise issues from existing operations.

4.3.4 MITIGATION

None.

4.4 TOPOGRAPHY, GEOLOGY, AND SOILS

4.4.1 PREFERRED ACTION ALTERNATIVE (ALTERNATIVE B)

Under the Preferred Action Alternative, *no significant adverse effects* to topography, geology, or soils would be anticipated.

Implementation of the Preferred Action Alternative would require minimal cutting and filling, but major changes in topography and drainage patterns would not be expected. *No impacts* to geology or bedrock (i.e., deep excavation) are proposed or anticipated. No geologic hazards are apparent in the project area and would not be expected to impact human health as a result of project implementation. Based on currently available data, no active significant faults are known at this time to extend through the project site subsurface geology. As such, no impacts associated with seismic hazards are identified. No significant impacts to mineral resources are anticipated, as the Proposed Action would not involve the commercial extraction of mineral resources, nor affect mineral resources considered important on a local, state, national, or global basis.

During construction activities, short-term erosion and sedimentation impacts would be possible due to removal of vegetative cover, disturbance of the soil surface, and/or compaction. Subsequently, local soils would be more susceptible to short-term erosion by wind and surface runoff. Such potential effects would be prevented through the utilization of appropriate BMPs and adherence to the terms of the WVDEP National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit. The WVARNG would prepare a detailed, site-specific Erosion and Sedimentation (E&S) Control Plan to address all earth-disturbance aspects of the Proposed Action, including all project components. The E&S Control Plan would include BMPs, such as specific guidelines and engineering controls, to mitigate anticipated erosion and resultant sedimentation impacts from establishment and operation of the proposed facilities.

These measures would include:

- Install and monitor erosion-prevention measures (BMPs) such as silt fences and water breaks, sedimentation basins, filter fences, sediment berms, interceptor ditches, straw bales, rip-rap, and/or other sediment control structures; re-spreading stockpiled topsoil; and seeding/revegetation of areas temporarily cleared of vegetation.
- Retain forest vegetation and riparian vegetation to the maximum extent possible.
- Plant and maintain soil-stabilizing vegetation on disturbed areas other than bare earth training areas.

- Use native vegetation to revegetate disturbed soils.

No prime farmland soil would be impacted under the Preferred Action Alternative (see **Figure 9**).

Spent ammunition would accumulate over time within the range footprints and SDZs. Some lead slugs would be buried up to about six inches in the soil and some slugs and casings would be on the surface. As a result, there is potential for lead, copper, and iron to accumulate in surface soil and to be transported off-site. Of particular concern are soils with low pH values (i.e., acidic conditions) and acid rain. The Clean Air Task Force reports that acidic rain in West Virginia had pHs between 4.5 and 4.2 (Clean Air Task Force, 1999). These metals react more readily and may become more mobile under acidic conditions. This means that spent lead slugs and brass casings left in or on such soils may eventually break down and contaminate underlying soil. The ideal soil pH value for shooting ranges is between 6.5 and 8.5. Factors affecting the amount of lead transported off-site by surface water runoff include the amount of lead fragments left on the range and the velocity of the runoff (USEPA, 2001). Under the Preferred Alternative, the WVARNG will follow appropriate BMPs to prevent or minimize lead or other contaminant migration off-site. The selected BMPs would be limited to the minimum required based on the type of range and ammunition used, site-specific conditions, range design features, and will include applicable range maintenance procedures. The explosives used at the demolition range and HGFR would leave some contaminant residue, but this would be localized within the demolition/hand grenade pits and would not move off site due to onsite soil properties (heavy clay), which limit the potential for migration. All ranges will be periodically evaluated and monitored in accordance with the Army's Operational Range Assessment Program (ORAP) (see also **Section 5.6.1**).

4.4.2 BUILD ALTERNATIVE (ALTERNATIVE A)

Impacts under the proposed Build Alternative would be similar to the Preferred Action Alternative.

4.4.3 NO ACTION ALTERNATIVE

Implementation of the No Action Alternative would have *no effect* on the current geology, topography, and soils at the BMTA. The BMTA would remain as described in **Section 3.0**.

4.4.4 MITIGATION

None.

4.5 WATER RESOURCES

4.5.1 PREFERRED ACTION ALTERNATIVE (ALTERNATIVE B)

Under the Preferred Action Alternative, *no significant adverse effects* to water resources would be anticipated.

The proposed HGFR, LFBF, and MK 19 range are located on a ridge line. The elevation along the ridge line is approximately 2,700 feet asl. A small ephemeral stream would be crossed by the MK 19 range footprint (approximately 170 linear feet or 0.01 acres) (see **Figure 7**). The WVARNG anticipates that potential impacts to the small ephemeral stream within the MK 19 range can be avoided during project design. A 10 June 2014 USACE letter determined, based on information provided by WVARNG and a USACE site visit, that no waters of the United States will be affected by the construction of the ranges (see **Appendix B**).

As part of the access trail improvements, a 30-foot long, 72-inch wide, corrugated metal culvert is expected to be used to cross a fork of Stamping Ground Run. A CWA Section 404 Nationwide permit will be required for the proposed stream crossing permit.

No wetlands occur within the range footprints (see **Figure 7**). Therefore, no impacts to wetlands are anticipated as a result of the Preferred Action Alternative.

Implementation of specific BMPs and adherence to regulatory requirements would be required for implementation of the Preferred Action Alternative. The WVARNG will comply with the terms of the NPDES General Permit for Surface Water Discharge Associated with Construction Activity. During construction, the WVARNG will use BMPs as discussed in **Section 4.4.1**. This impact is anticipated to constitute a *minor indirect short-term adverse impact* to water quality. Long-term surface water protection will be accomplished by implementing BMPs and the CDCTC SPCCP, and by maintaining vegetative cover.

Potential impacts to ground and surface water resources are possible from inadvertent releases of contaminants, such as fuel and other petroleum products, other fluids from vehicles used on the range, and sediment from soil disturbance during construction. **Section 4.11** discusses potential pollution (i.e., from chemicals, fuels, etc.) impacts attributable to the Preferred Action Alternative, and identifies BMPs.

The potential impacts from range operations and munitions, as well as implementation of range BMPs to minimize these impacts, are discussed in **Section 4.4.1**. The types of ammunition used on the proposed ranges, coupled with implementation of range BMPs, are not expected to result in surface or groundwater impacts. The explosives used at the HGFR could leave some contaminant residue within the demolition/hand grenade pits. Surface water and groundwater contamination is not expected due to the small amount of residue. Potential sources of surface water and groundwater contamination are evaluated and monitored as part of the ORAP. No new groundwater extraction wells are proposed as a result of implementation of the Preferred Action Alternative; therefore, there would be no impacts to groundwater supply.

4.5.2 BUILD ALTERNATIVE (ALTERNATIVE A)

Water resources impacts under the proposed Build Alternative would be similar to the Preferred Action Alternative (see **Section 4.5.1**). Under the Build Alternative, a small ephemeral stream would be crossed by the MK 19 range footprint (approximately 170 linear feet or 0.01 acres) and by the LFBF footprint (approximately 80 linear feet or 0.005 acres). The corrugated metal culvert as part of the logging trail/access road improvements would also occur with this alternative. No wetlands occur within the range footprints (see **Figure 7**). The WVARNG intends to avoid or minimize stream impacts during design of the proposed ranges. Implementation of BMPs and adherence to regulatory requirements would be similar to the Preferred Action Alternative (see **Section 4.5.1**).

4.5.3 NO ACTION ALTERNATIVE

Implementation of the No Action Alternative would have no effects on the current ground and surface water resources at the BMTA. The BMTA would remain as described in **Section 3.0**.

4.5.4 MITIGATION

None.

4.6 BIOLOGICAL RESOURCES

4.6.1 PREFERRED ACTION ALTERNATIVE (ALTERNATIVE B)

Under the Preferred Action Alternative, short- and long-term, less-than-significant (minor), adverse effects to biological resources would be anticipated. *Long-term, minor, beneficial impacts to biological resources* are also expected.

4.6.1.1 FLORA

Implementation of the Preferred Action Alternative would change the type of use and/or increase the frequency of use on approximately 3 acres of existing training land (see **Section 5.2.1**). Trees, brush, and regrowth would be cleared as needed from the proposed range footprints, access road, and parking area. These changes would produce impacts on existing biological resources.

According to the 2006 BMTA vegetation mapping (**Figure 8**), the Proposed Action area encompass the following plant communities:

LFBF – mixed montane hardwood forest (1.48 acre)

HGFR – mixed montane hardwood forest (7.01 acres).

Allegheny Wood Products has previously clear cut the area where the MK 19 range will be located.

The loss of forest land as a result of the Preferred Action Alternative is considered negligible in relation to the abundance of this vegetation type on the BMTA. The WV Division of Forestry determined that there would be no adverse effects to the environment from the Proposed Action (see **Appendix A**). The creation of additional grasslands (approximately 15 acres), a limited upland habitat type within the BMTA, would be considered a *long-term, minor, beneficial impact*. This would provide increased habitat diversity within the BMTA. In addition, it is anticipated approximately 351 acres of forested land would be preserved within the range SDZs during the operational life of the ranges because additional development within these areas would be limited.

Overall, adverse impacts to on-site vegetative resources would be minor given the abundance of forest resources still extant across the BMTA and throughout Preston County. Additionally, the BMTA has been periodically impacted through AWP timber harvests, which include large vehicle traffic and sometimes the formation of logging roads.

Vegetative communities adjacent to the range footprints would be minimally impacted. These adjacent areas may receive some increased foot traffic, but it would not be expected to be enough to negatively impact the plant community.

Native species will be used to the extent practicable when revegetating land disturbed by range construction, and the majority of the range footprints would be managed as grasslands, as feasible.

Short-term impacts of the proposed projects may include temporary disturbances to adjacent vegetative communities. Following construction, adjacent vegetative communities would return to pre-construction conditions.

Long-term impacts to vegetation from proposed range operation would be minor and managed in accordance with existing WVARNG land management practices under the Integrated Training Area Management program.

4.6.1.2 FAUNA

Wildlife in the proposed project areas would sustain *less-than-significant (minor), direct and indirect, short- and long-term, beneficial and adverse impacts*, associated with habitat conversion and construction activities. During construction activities, wildlife would be expected to vacate the immediate areas. Some individuals of the less mobile species (i.e., small mammals, reptiles, amphibians) could be lost during construction. The relatively small areas of disturbance and large areas of unfragmented undisturbed areas make expected impacts to wildlife *less than significant*.

Mobile wildlife would tend to vacate the ranges and/or areas adjacent to the range while it is in use. These ranges would add field/grassland and edge habitat, benefiting some species from increased habitat diversity and resulting changes in flora and fauna. The increased human presence in the area and elevated noise levels would affect some species more than others.

The WVARNG is responsible under the MBTA, 50 CFR 21, and EO 13186 (*Responsibilities of Federal Agencies to Protect Migratory Birds*) to promote and protect migratory birds. The WVARNG reviewed the DoD Partners in Flight website for Bird Species of Concern, Bird Conservation Region No. 28 – Appalachian Mountains. Some of the species of concern identified in the Appalachian Mountains region could potentially occur in Preston County. The proposed ranges have the potential to have a *minor adverse* impact to migratory birds due to incidental take from training activities. Overall, impacts to migratory birds are anticipated to be negligible. Management measures for migratory birds will be conducted in accordance with the CDCTC INRMP which includes annual bird count surveys. The WVARNG will follow BMPs to reduce avian risk, to the extent practicable, such as conducting land disturbing activities either before or after nesting season (spring).

4.6.1.3 THREATENED AND ENDANGERED SPECIES

No federally listed species are known to occur within the proposed construction footprints or SDZs. Running buffalo clover is a federally listed species known to occur at the BMTA. This species has been observed previously on the southeastern edge of the BMTA, and therefore, would not be affected under the Preferred Action Alternative (**Figure 8**).

While no Indiana bats have been captured during previous survey efforts, the BMTA does contain suitable habitat. WVARNG anticipates keeping tree clearance to a minimum by using existing trails and/or logging roads as access roads leading to the ranges. It is expected that approximately 8.49 acres of mixed montane hardwood forest will be cleared for the LFBF and HGFR, parking area, and a new access road. The MK 19 range construction will not require any tree removal as it will utilize a portion of a 15-acre clear cut that was harvested in 2012. All tree removal will occur between 15 November and 31 March. The Proposed Action area is comprised of low quality habitat as compared to the surrounding landscape and due to its relatively small size, it is anticipated to have insignificant effects on bat habitat.

The BMTA occupies approximately 1,251 acres and consists of mainly second growth forest. It provides suitable habitat in the form of flight corridors, food and water resources, and potential roosting trees that lie outside the Proposed Action area. No Indiana bat or northern long-eared bat winter habitat (e.g., caves or mines) was identified within the Proposed Action area.

USFWS has evaluated the availability of suitable foraging and roosting habitats in West Virginia relative to the best estimate of the statewide population of Indiana bats. Based on this analysis, USFWS has determined that projects that affect 17 acres or less of suitable forest habitat and that occur more than 5 miles from any known Indiana bat hibernaculum or more than 2.5 miles from any known maternity roost or more than 5 miles from any summer capture site, are very

unlikely to result in direct or indirect impacts the Indiana bat species. Therefore, the USFWS determined that the Proposed Action is not likely to adversely affect the Indiana bat and northern long-eared bat (see 11 July 2014 USFWS letter in **Appendix B**).

4.6.2 BUILD ALTERNATIVE (ALTERNATIVE A)

Impacts under the proposed Build Alternative would be similar to the Preferred Action Alternative (see **Section 5.7.1**). Under the Build Alternative, slightly more acres of forested land (410 acres) would be preserved within the range SDZs during the operational life of the ranges because additional development within these areas would be limited.

4.6.3 NO ACTION ALTERNATIVE

Under the No-Action Alternative, existing forested areas would not be cleared and the proposed ranges would not be constructed. No noise or elevated human presence from range operations would occur within the proposed range locations. However, species that prosper with meadow and edge habitat would realize no benefit, as no land clearing would occur.

4.6.4 MITIGATION

None.

4.7 CULTURAL RESOURCES

4.7.1 PREFERRED ACTION ALTERNATIVE (ALTERNATIVE B)

No buildings over 50 years of age are located within the BMTA. No traditional cultural resources have been identified at the CDCTC to date. None of the four identified archaeological sites with potential eligibility for NRHP listing on the BMTA are located within the construction footprint. One potential eligible site, 46PR90, a prehistoric rock shelter, is located outside the MK 19 range footprint but within the SDZ. Site 46PR90 is located within the MRFR SDZ.

Site 46PR90 is small, measuring 10 meters (m) long and ranging from 2 m to 3 m in depth from the dripline. It is located within a heavily wooded area, covered by a dense understory of brush, briars, and small saplings. The prehistoric assemblage from site 46PR90 consisted of one cobble and two pieces of debitage (flake and angular chert fragment). Range construction is not anticipated to have a direct effect on cultural or tribal resources under the Preferred Action Alternative. Site 46PR90 is located within the SDZ of the MK 19 range, approximately 1,900 meters from the firing line. WVARNG coordinated with the WVSHPO concerning site 46PR90 in a letter dated 20 June 2014. The WVSHPO concurrence letter dated 22 July 2014 determined that the Proposed Action will have no adverse effect on historic properties (see **Appendix B**). WVSHPO requested that WVARNG periodically check site 46PR90 to ensure it has not been affected by training exercises and that WVARNG notify WVSHPO if damage to the site is discovered. As a BMP, WVARNG will check on site 46PR90 annually to determine if training exercises are having any effect on the rock shelter and will report to WVSHPO if damage is occurring.

Native American consultation for this EA was initiated by the WVARNG in accordance with NEPA, NHPA, and DoDI 4710.02 (*DoD Interactions with Federally Recognized Tribes*), which implements the *Annotated DoD American Indian and Alaska Native Policy* (dated 27 October 1999); EO 13175 (*Consultation and Coordination with Indian Tribal Governments*); and AR 200-1. There have been no sacred, religious, cultural or traditional resources identified by the Native American Indian tribes that will be affected by the Preferred Action Alternative. A list of tribes contacted, copies of correspondence letters, and a MFR are included in **Appendix B** and **Appendix E**. The WVARNG will continue to consult with the Native American tribes having

potential ancestral ties to the CDCTC area that have expressed interest in participating in the NEPA process or that have not responded to previous consultation attempts. The consultation process is discussed in greater detail in **Section 3.8.5**. A MFR is included in **Appendix E**.

In the event of an inadvertent discovery of cultural items or tribal resources, the WVARNG would follow SOP 5 of the WVARNG ICRMP.

4.7.2 BUILD ALTERNATIVE (ALTERNATIVE A)

Impacts under the proposed Build Alternative would be similar to the Preferred Action Alternative (see **Section 4.7.1**). No effect is anticipated on architectural or traditional cultural resources as a result of the Build Alternative.

4.7.3 NO ACTION ALTERNATIVE

No change in use or configuration of the installation would occur, and no impacts to cultural resources at the CDCTC would result.

4.7.4 MITIGATION

None.

4.8 SOCIOECONOMICS

4.8.1 PREFERRED ACTION ALTERNATIVE (ALTERNATIVE B)

Under the Preferred Action Alternative, *minor, short-term positive socioeconomic effects* associated with construction activities and timber harvesting are anticipated from range development. *No significant adverse socioeconomic effects* to public health and safety, children, and recreational activities would be anticipated from construction of the ranges.

The Preferred Action Alternative would result in *minor, long-term positive socioeconomic impacts* by maintaining an enhanced training facility that is more heavily used, subsequently resulting in socioeconomic benefits to the surrounding areas. *Short-term positive impacts* would result from construction activities occurring on-site, while *long-term positive impacts* would result from increased personnel visiting the area, primarily for training. Despite this anticipated increase in training, no permanent relocation of military personnel to the area is part of the Preferred Action Alternative. Therefore, socioeconomic impacts to the region primarily would be based on the temporary influx of training personnel, at a minimum requiring services and meals. Consequently, no significant impacts to area schools, permanent housing, or long-term population are anticipated.

Construction of the proposed facilities will use in house CDCTC labor. As part of the timber lease agreement, Allegheny Wood Products would also receive a minor short-term positive impact from harvesting approximately 2.5 acres of trees in areas to be cleared. Due to the small acreage involved, no long-term impacts to the civilian labor force are anticipated. Therefore, *minor, short-term positive socioeconomic impacts* associated with construction activities are anticipated for local employment and personal income. Increased construction would indirectly benefit the local economy through the spending of business and personal income generated. As such, a *minor, positive impact* to the local economy is anticipated.

Training activities at the CDCTC would increase under the Preferred Action Alternative. This increased training use could result in *minor adverse impacts* to occupational health and safety. Additional demand could be placed on police and fire protection services, as well as for medical services, should an accident occur during training activities.

No impacts to public health and safety are anticipated. The proposed range access roads will be gated and locked when not in use, limiting unauthorized access. A guard would be posted at the gate during training activities, and range control would monitor activity. None of the proposed project components are anticipated to have an effect on public health and safety outside of the installation boundary (see **Section 4.3.1** that discusses off-Post noise impacts).

The proposed increase in training activities would reduce recreational availability, including hunting, trapping and hiking. The public would continue to have access to WMA natural resources in a manner that does not conflict with military activities. Military missions and related land use will continue to have priority over public access for recreation. The BMTA would be restricted for safety reasons to all individuals and activities during range use. A guard would be posted at the gate during training activities, and range control would monitor activity. The access roads to the proposed ranges would be gated and locked when not in use, limiting unauthorized access.

The Preferred Action Alternative would not disproportionately affect children. Children are seldom present at the CDCTC as visitors, and no children reside at the CDCTC. Local schools would not experience adverse impacts from increased noise. As such, no endangerment or adverse effects to children are anticipated.

4.8.2 BUILD ALTERNATIVE (ALTERNATIVE A)

Impacts from the construction and operation of Alternative B would be similar to the Preferred Action Alternative (see **Section 5.9.1**).

4.8.3 NO ACTION ALTERNATIVE

Implementation of the No Action Alternative would not affect the current socioeconomic environment around the CDCTC.

4.8.4 MITIGATION

None.

4.9 ENVIRONMENTAL JUSTICE

4.9.1 PREFERRED ACTION ALTERNATIVE (ALTERNATIVE B)

Under the Preferred Action Alternative, *no significant adverse environmental justice effects* would be anticipated. No specific concentrations of minority populations are located in the vicinity, and no local groups are known to principally rely on fish or wildlife for subsistence. Consequently, no adverse impacts to such disadvantaged segments of the population are anticipated.

The Preferred Action Alternative would result in *minor, long-term positive* socioeconomic impacts by maintaining an enhanced training facility that is more heavily used, resulting in socioeconomic benefits to the surrounding areas. These long-term benefits would be proportionately shared by all population segments surrounding the installation.

4.9.2 BUILD ALTERNATIVE (ALTERNATIVE A)

Impacts from the construction and operation of Alternative A would be similar to the Preferred Action Alternative (see **Section 5.10.1**).

4.9.3 NO ACTION ALTERNATIVE

Implementation of the No Action Alternative would not affect environmental justice.

4.9.4 MITIGATION

None.

4.10 INFRASTRUCTURE

4.10.1 PREFERRED ACTION ALTERNATIVE (ALTERNATIVE B)

Under the Preferred Action Alternative, *no significant adverse effects* to CDCTC's or other area infrastructure would be anticipated.

No significant impacts to energy sources (i.e., electrical power, fuel oil, or propane gas), telecommunications, potable water supply, wastewater treatment, solid waste disposal, or rail access are anticipated. BMTA does not currently have access to electric, gas, telecommunications, wastewater treatment, or potable water services, and no utility improvements or extensions are anticipated within the Preferred Action Alternative.

Roadway improvements related to the Proposed Action Alternative B include upgrading logging trail/access roads to the LFBF, HGFR, and MK 19 range support areas. The WVARNG does not anticipate the need for a large amount of land clearance as numerous logging trails exist within the BMTA that can be utilized to create new access and maintenance roads. The WVARNG estimates that land clearance for road improvements would be less than approximately 2,000 linear feet or 1.0 acre in area. No roadway improvements would be necessary to any existing county or BMTA roads under the Preferred Action Alternative outside of normal maintenance activities.

Total traffic volumes of CDCTC-related users may increase by 25 percent over current conditions in the vicinity of BMTA, and would occur during daytime and nighttime hours. The amount of traffic predicted should not cause undue delays or hardship to the local population. However, this traffic would increase wear on these roads and could increase maintenance frequency. WVARNG will work with local authorities to address traffic volume and/or roadway condition issues, if they arise.

4.10.2 BUILD ALTERNATIVE (ALTERNATIVE A)

Impacts from the construction and operation of Alternative A would be similar to the Preferred Action Alternative (see **Section 4.10.1**).

4.10.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, logging roads would not be extended or improved through the BMTA to connect to the proposed ranges. Implementation of this Alternative would have a *minor, long-term adverse* impact to the BMTA infrastructure.

4.10.4 MITIGATION

None.

4.11 HAZARDOUS AND TOXIC MATERIALS AND WASTES

4.11.1 PREFERRED ACTION ALTERNATIVE (ALTERNATIVE A)

Under the Preferred Action Alternative, no significant adverse Hazardous and Toxic Materials and Wastes (HTMW) effects would be anticipated.

The overall HTMW impacts associated with implementation of the Preferred Action Alternative are expected to be minimal to moderate, and would be kept at *less-than-significant levels* through implementation of and adherence to standard BMPs. Implementation of the Preferred

Action Alternative would not substantially affect the installation's hazardous materials storage and handling procedures, hazardous waste disposal processes, or pesticide waste program.

No asbestos-containing materials are used during construction of new facilities on the BMTA. In accordance with the Lead Contamination Control Act, no lead-based paints are used during construction of new buildings and structures.

Most potential adverse HTMW impacts would result from the collective implementation of the Preferred Action Alternative, rather than from any one component. The net increase in construction (short-term) and training (long-term) at the BMTA under the Preferred Action Alternative would produce minor increases in handling, storage, use, transportation, and disposal of HTMW. The anticipated increases would include additional vehicle and equipment use, construction of the proposed training facilities. These activities would result in minor increases in consumption of operating fluids, including fuel, and maintenance materials, such as paint. New facilities would be potential contamination sources for such products as diesel fuel, motor gasoline (MOGAS), oil, antifreeze, lubricants, and lead, among others. Releases over a long period of time could potentially lead to soil, surface water, and/or groundwater contamination, and thus require some form of remediation.

Equipment storage would be in buildings, and is expected to have no adverse impact. There is some potential for adverse impacts when the equipment is in use. Equipment use, fuel storage, and refueling operations have the potential for diesel fuel and MOGAS leakage/spillage. Roadways have the potential for fluid spills in transition from the facility location to training sites. The WVARNG will operate under existing requirements and BMPs. As such, a *minor, long-term adverse* impact is anticipated.

4.11.2 BUILD ALTERNATIVE (ALTERNATIVE A)

Impacts from the construction and operation of Alternative A would be similar to the Preferred Action Alternative (see **Section 4.11.1**).

4.11.3 NO ACTION ALTERNATIVE

Implementation of the No Action Alternative would have no effect with respect to HTMW at the BMTA. The BMTA would remain as it was described in **Section 3.0**.

4.11.4 MITIGATION

None.

4.12 CUMULATIVE EFFECTS

As defined by CEQ regulations in 40 CFR Part 1508.7, cumulative impacts are those that "result from the incremental impact of the Proposed Actions 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 impact analysis captures the effects that result from the Proposed Action(s) in combination with the effects of other actions taken during the duration of the Proposed Action(s) in the same geographic area.

NEPA requires analysis of cumulative environmental effects of a Proposed Action, or set of actions, on resources that may often be manifested only at the cumulative level, such as traffic congestion, air quality, noise, biological resources, cultural resources, socioeconomic conditions, utility system capacities, and others.

4.12.1 PREFERRED ACTION ALTERNATIVE (ALTERNATIVE B)

The CDCTC is bordered by rural, heavily forested, and steep lands. While no zoning or land use restrictions are in place for Preston County, development in the region is not anticipated to increase substantially due to population growth trends since 1990. The population of Preston County has had little to no change, while the City of Kingwood's population declined approximately 9.2 percent between 1990 and 2000 and has remained relatively stable since 2000. The State of West Virginia has also experienced this little population growth as well.

Principal land use activities within Preston County and around the CDCTC include logging operations, some agriculture, and limited strip and deep mining for coal, although the amount of the coal mining has almost totally stopped due to Federal regulations, in particular, the 1977 SMCRA. Due to the steep topography, the land immediately around CDCTC is not suitable for large-scale agricultural purposes. However, limited agriculture does exist on small, relatively level areas, usually on valley floors and hilltops. Some industry (e.g. railroad, car cleaning and public utilities) can be found along the Cheat River, particularly toward Albright, West Virginia (AMEC, 2007).

Coal mining in West Virginia has provided thousands of jobs across many decades, fueling the country's energy needs and even supporting war efforts. West Virginia's coal is bituminous and occurs in seams of mineable thickness in 43 of the state's 55 counties. Economically, coal mining seems very lucrative, yet environmentally coal mining has shown its effects on many areas in West Virginia. The Cheat River is one area in particular that coal mining has taken a toll. The Cheat River runs north-south through the County and CDCTC. Lands surrounding the Cheat River watershed are full of rich natural resources, with diverse forest and abundant water. Nearly 10,000 acres of abandoned mines drain millions of gallons of PCMD into the Cheat River daily. Abandoned mine lands consist of old mining areas where mining ceased prior to the 1977 SMCRA. SMCRA set forth standards regarding mining regulations, especially reclamation practices. Prior to SMCRA mining regulations were very relaxed, which was detrimental to the surrounding environment. As a result, many miles of streams are essentially dead due to the PCMD associated with the coal mining industry (AMEC, 2007).

Several regional comprehensive plans were consulted to identify past, present and reasonably foreseeable future actions within the region of interest. These plans included the RDP (WVARNG, 2008), the Camp Dawson Training Facility Master Plan (TFMP) (WVARNG, 2009), West Virginia Department of Transportation (WVDOT) *Statewide Transportation Improvement Program (STIP) 2010-2015* (WVDOT, 2010), and *Preston County School District Bond Plan* (PSC, 2010). In addition, the CDCTC regularly participates in a Community Relations Information Forum (CRIF), which meets with leaders from the nearby local communities. On a quarterly basis, the WVARNG invites local hospitals, county commissioners, mayors, sheriffs, local emergency services, Federal prison employees, local business bureaus, Economic Development Administration, major/ large businesses in the area, and Veterans of Foreign Wars Chapters. The CRIF acts as a line of communication from the post to the community and vice versa. At each, meeting, the WVARNG provides a briefing on what is happening at the CDCTC, such as planned construction and changes at Camp Dawson. It is also an opportunity for community representatives to bring up other issues and/or to discuss community needs where the WVARNG may be involved or be able to help. The WVARNG tries to address issues brought up during the meetings and/or responds at a later date, as appropriate.

The Goldmine Tract and Whitehair Tract are used by the WVARNG for land navigation training, driver training, and small unit tactical maneuvers. However, the current owner does not plan to allow significant development of these land tracts for increased training purposes. The RDP establishes current requirements and utilization levels for available training assets and provides

a near and long term project plan for training, public works, and environmental planners. The TFMP sets the stage for future development and planning at the CDCTC to ensure its longevity as a valuable training resource. TFMP identified that the majority of the buildings in the Cantonment Area are operating over capacity. Thus, improvements to these buildings and/or new facility development are needed to provide sufficient administrative and training space. The majority of new development is planned within the Cantonment Area, which is already a highly developed maintained land area. Range development is planned for the Pringle Tract TA.

According to the WVDOT STIP 2010-2015, only four transportation projects are planned for Preston County. Projects include road resurfacing in two areas in the northern portion of the county and two bridge replacement projects. One of the bridge replacement projects is located in the vicinity of the Volkstone TA. The replacement of the Morgan Run Arch Bridge is slated for 2014.

Overall, the Proposed Action is not anticipated to have a major cumulative impact on the Region.

4.12.2 CUMULATIVE EFFECTS OF THE PROPOSED ACTION

The mission of the WVARNG requires that it meet training objectives. Land and facilities are necessary to accommodate training. Reasonably foreseeable future actions include potential improvements to local roadways, acquisition of additional training land by WVARNG, and continued timber harvesting by AWP. *No significant adverse cumulative impacts* to the environment, induced by the Preferred Action Alternative, are anticipated.

Land Use, Noise and Public Access – The Preferred Action Alternative would not contribute significantly to cumulative land use change in the Briery Mountain and Preston County area. The BMTA is already a military training area. The Preferred Action Alternative would change the intensity, not the type, of use. Additional activity at the CDCTC would be unlikely to foster more than minimal additional development in the local area because most of the Soldiers' needs would be met through Cantonment Area facilities.

The WVARNG and CDCTC would continue to work with local government agencies and communities identifying potential noise and land use incompatibility and addressing possible noise issues, including restricting development of residences or other sensitive receptors within Noise Zone II. Noise from range operation would elevate existing noise levels in the immediate area and result in a *minor, adverse* cumulative impact. Impulse-type noise from hunting is already a part of the local noise environment during permitted hunting seasons.

Future development of the CDCTC to meet the training needs of the WVARNG is addressed in the CDCTC Master Plan. The majority of new development is planned within the Cantonment Area, which is already a highly developed maintained land area. However, expansion of available training land is necessary to support the current training requirements of the WVARNG using the site. Consequently, the WVARNG is considering additional acreage to better achieve the military training mission. Because most of the tracts that would be leased surrounding the CDCTC are similar to the current training sites, the WVARNG expects mission effects to any new sites would be similar to effects at existing training areas within the CDCTC.

The Preferred Action Alternative would make a minor cumulative contribution to reduction in public access to public lands. Public access would be restricted for safety reasons to all individuals and activities during range use. While this reduction in use may inconvenience the local hunters, it is not considered to be a significant regional impact. The WVDNR manages 1.4 million acres, representing 8 percent of the state's total land area for public wildlife associated recreation (WVDNR, 2007).

Air Quality – The project would not contribute to a significant cumulative decrease in regional air quality.

Soil and Water Resources – No cumulative impact is anticipated to soil and water resources. Adherence to permit conditions; completion of required mitigation, if any; and implementation of BMPs for soil erosion, sedimentation, and management of spent ammunition would protect regional soil and water resources.

Biological Resources – The Preferred Action Alternative would not contribute noticeably to cumulative pressure on forested land, since timber rights on the property belong to AWP and the BMTA is periodically harvested. However, approximately 20.82 acres of forest would be permanently converted for the three proposed ranges. This change would reduce forested habitat and add field/grassland and edge habitat, benefiting some species and not others. This reduction in forested habitat represents less than 1 percent of the BMTA forest habitat.

Cultural Resources – No cultural resources at the BMTA would be affected within the construction limits of the proposed ranges. No cumulative impacts are anticipated to known archaeological sites or cemeteries in the area.

Socioeconomics – Cumulative net positive impacts to the local socioeconomic environment would be realized through long-term viability of the CDCTC. However, range operation alone would be unlikely to foster more than minimal additional development in the local area because most of the Soldiers' needs would be met through Cantonment Area facilities.

Environmental Justice – No cumulative disproportionate or adverse impacts to minority or low-income populations are anticipated.

Infrastructure – The Preferred Action Alternative would have a minor, cumulative effect on traffic in the area, and would cause a minor increase in local traffic volumes. While the project would add to cumulative pressures on traffic, the BMTA is already a training area, and CDCTC traffic between the various training areas already occurs. Increased military traffic on local roads would increase maintenance requirements on these roads. Long-term, local roadway improvements could alleviate some of these issues.

HTMW – The project would not contribute to a significant cumulative increase in HTMW. The WVARNG would adhere to regulatory requirements and implement BMPs to ensure HTMW remain at less *less-than-significant* levels.

Cumulative impacts from the construction and operation of Alternative A would be similar to the Preferred Action Alternative.

Implementation of the No Action Alternative would continue to limit the WVARNG's ability to train and ensure attainment and maintenance of a full readiness posture and to meet mission-training objectives. Under the No Action Alternative, no cumulative impacts to CDCTC or Preston County would occur as the Proposed Action would not be undertaken.

No mitigation for cumulative impacts is anticipated.

and operation of the Preferred Action Alternative component projects. These “management measures” are described in this EA, and are included as components of the Preferred Action Alternative. “Management measures” are defined as routine BMPs and/or regulatory compliance measures the WVARNG regularly implements as part of their activities, as appropriate, across the State of West Virginia. These BMPs are different from “mitigation measures.

To maintain their stewardship posture, the WVARNG will implement the following BMPs, as appropriate, for this Proposed Action:

Air Quality

Reduce or eliminate fugitive dust emissions and minimize impacts to air quality by watering disturbed areas and unpaved roads, limiting vehicle speeds on unpaved areas, covering haul trucks with tarps, and stabilizing previously disturbed areas if they will be inactive for several weeks or more.

Noise

Reduce noise impacts during construction by limiting construction and associated heavy truck traffic between nine p.m. to seven a.m. This measure would reduce noise impacts during sensitive night-time hours.

Locate stationary equipment as far away from sensitive receivers as possible.

Select material transportation routes as far away from sensitive receivers as possible.

Shut down noise-generating heavy equipment when it is not needed.

Maintain equipment per manufacturer’s recommendations.

Erosion

Prepare a detailed, site-specific Erosion and Sedimentation (E&S) Control Plan to address all earth-disturbance aspects of the Proposed Action. The E&S Control Plan would include BMPs, such as specific guidelines and engineering controls, to mitigate anticipated erosion and resultant sedimentation impacts from establishment and operation of the proposed facilities.

Install and monitor erosion-prevention measures such as silt fences, sedimentation basins, straw bales, and/or other sediment control structures; re-spreading stockpiled topsoil; and seeding/revegetation of areas temporarily cleared of vegetation.

Retain forest vegetation and riparian vegetation to the maximum extent possible. Use native vegetation to revegetate disturbed soils.

Migratory Birds

Reduce avian risk, to the extent practicable, by conducting land disturbing activities either before or after nesting season (spring).

Cultural Resources

In case of inadvertent discovery of cultural items or tribal resources, the WVARNG would follow SOP 5 of the WVARNG ICRMP.

WVARNG will check on archaeological site 46PR90 annually to determine if training exercises are having any effect on the rock shelter and will report to WVSHPO if damage is occurring.

In the event that human remains were discovered, all work in the area would stop and the Preston County Coroner would be notified immediately. If the remains were determined to be

Native American, then the Native American tribes with interest in the area would be notified within 24 hours of discovery.

Hazardous and Toxic Materials

Comply with Federal, State, and local requirements, as well as Army BMPs for handling and storing small quantities of products such as paint, oil, antifreeze, lubricants, and detergents.

5.3 CONCLUSIONS

The evaluation performed within this EA concludes there would be *no significant adverse impact*, either individually or cumulatively, to the local environment or quality of life as a result of implementing the Proposed Action, provided the BMPs in this EA are implemented. This EA's analysis determines, therefore, an EIS is unnecessary for implementation of the Preferred Action Alternative, and a FNSI is appropriate. WVARNG determined that Alternative B is the preferred alternative because Alternative B LFBF's SDZ has more of an overlap with the existing MRFR's SDZ and more of an overlap with the MK 19 range's SDZ. Therefore, Alternative B would require less land for operation. By moving the LFBF farther away from the MK 19 range, Alternative B reduces potential conflicts between these two ranges and would allow operation of both ranges simultaneously. Existing logging trails will be utilized for access. Alternative B would allow better usage of the existing trails for access. Positive impacts to onsite land use, the local socioeconomic environment, and onsite infrastructure would be anticipated. This EA recommends implementation of the Preferred Action Alternative (Alternative B). Implementation of this Alternative and these measures would fulfill the purpose of and need for the Proposed Action, allowing the WVARNG to accomplish its assigned military missions, while minimizing potential impacts to the local and regional natural, cultural, and socioeconomic environment.

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SECTION 6. REFERENCES

- 32 CFR 651 Title 32--National Defense, Chapter V—Department of the Army. Part 651—Environmental Analysis of Army Actions (see AR 200-1)
- 36 CFR 60 Title 36 Code of Federal Regulations Part 60. U.S. Department of Interior, National Register of Historic Places, Code of Federal Regulations.
- 36 CFR 800 Title 36 Code of Federal Regulations Part 800. U.S. Department of Interior, National Register of Historic Places, Code of Federal Regulations.
- 40 CFR 51 Title 40 Code of Federal Regulations Part 51, Subpart W. General Conformity Rule.
- 40 CFR 261 Title 40 Code of Federal Regulations Part 261. Identification and Listing of Hazardous Waste.
- 40 CFR 302 Title 40 Code of Federal Regulations Part 261. Designation, Reportable Quantities, and Notification.
- AIRFA of 1978 American Indian Religious Freedom Act of 1978. 36 Code of Federal Regulations Part 79.
- AMEC, 2007 AMEC Earth and Environmental. January 2007. Integrated Natural Resource Management Plan and Environmental Assessment 2007-2011 Revision. AMEC Earth and Environmental, Columbus, Ohio Office.
- Anderson, 1998 Anderson, Lara S. 1998. US Army National Guard Cultural Resources Planning Level Survey: West Virginia. US Army Engineer District, St. Louis. (St. Louis, Missouri: US Army Corps of Engineers Mandatory Center of Expertise for the Curation and Management of Archaeological Collections).
- Anderson and Kerns, 2006 Anderson, James T. and Courtney K. Kerns. 25 August 2006. Wildlife Surveys on the Camp Dawson Army Training Site. West Virginia University - Wildlife and Fisheries Resources Program, Morgantown, West Virginia.
- Anderson et al, 2002 Anderson, James T., Greg M. Forcey, Joseph D. Osbourne, and Amy B. Spurgeon. January 2002. Camp Dawson Collective Training Area Faunal Assessment Report. West Virginia University, Division of Forestry - Wildlife and Fisheries Resources, Morgantown, West Virginia.
- Anderson et al., 2006 Anderson, James T., James S. Rentch. September 2006. Wetland Delineation on the Camp Dawson Army Training Site Final Report. West Virginia University, Division of Forestry and Natural Resources, Morgantown, West Virginia.
- AR 200-1 Army Regulation 200-1, Environmental Protection and Enhancement, 13 December 2007.
- AR 210-21 Army Regulation 210-21, Army Ranges and Training Land Program, 1 May 1997.
- AR 350-19 Army Regulation 350-19, The Army Sustainable Range Program (SRP). 30 August 2005.

ARPA	Archaeological Resources Protection Act of 1979. Public Law 96-95
Bureau of Labor, 2009	Bureau of Labor Statistics. Mid-Atlantic Information Services: Unemployment Rates by County in West Virginia, February 2009. Accessed 1 May 2009. http://www.bls.gov/ro3/wvlaus.htm
CAA	Clean Air Act Amendments of 1990; 33 USC 1344
CEQ, 2005	Council on Environmental Quality Executive. Memorandum: Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations.
CEQ, 1997	Council on Environmental Quality Executive Office of the President. January 1997. Considering Cumulative Effects under the National Environmental Policy Act.
CEQ, 1986	Council on Environmental Quality Executive. Memorandum: Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations.
Cowardin et al., 1979	Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe, 1979, Classification of Wetlands and Deepwater Habitats of the United States, Fish and Wildlife Service, Office of Biological Services, Washington, D.C. April 1986. March 1986
CWA of 1972	Clean Water Act; 33 USC 1344
DA, 1999	Department of the Army (DA). 1999. The Army Vision, Soldiers on Point for the Nation. October 1999.
DA, 2012	Department of the Army Pamphlet 385-63, Range Safety, effective 10 30 January 2012
DA, 2010	Training Circular (TC) 25-8. Training Ranges. Headquarters, Department of the Army, Washington, DC, 20 May 2010.
DA, 2004b	Final Environmental Impact Statement, Transformation of the 2 nd Brigade, 25 th Infantry Division (L) to a Stryker Brigade Combat Team in Hawai'i, May 2004. Prepared for the Department of the Army, Office of the Secretary of the Army, Washington, D.C., and the U.S. Army Corps of Engineers, Fort Shafter, Hawai'i. Prepared by Tetra Tech, Inc., Honolulu, Hawai'i.
DoD, 1999	Department of Defense Annotated American Indian and Alaska Native Policy, 27 October 1999.
DoD, 1996	Department of Defense Strategy on Environmental Justice. March 1996.
DoDI 4710.02	Department of Defense Instruction (DoDI) 4710.02, DoD Interactions with Federally Recognized Tribes, 14 September 2006.
DoDI 1215.18	DoD Instruction 1215.18, Reserve Component Member and Participation, 17 July 2002
EO 12416	Amends EO 12372

- EO 12898 Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, dated 11 February 1994
- EO 13007 Executive Order 13007, Indian Sacred Sites, 24 May 1996
- EO 13045 Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks, was issued on April 21, 1997.
- EO 12372 Executive Order 12372, Intergovernmental Review of Federal Programs, 14 July 1982
- EO 13175 Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, effective on 5 January 2001. Supersedes Executive Order 13084.
- Fabian and Watts, 2005 Army Small Arms Training Range Environmental Best Management Practices (BMPs) Manual, prepared by Gene Fabian, U.S. Army Aberdeen Test Center, and Kimberly Watts, U.S. Army Environmental Center. Report No. 9-CO-160-000-504. U.S. Army Aberdeen Test Center, Aberdeen Proving Ground, MD 21005-5059, December 2005.
- FICUN, 1980 Federal Interagency Committee on Urban Noise (FICUN). 1980. Guidelines for Considering Noise in Land Use Planning and Control. Washington, DC.
- FPPA Farmland Protection Policy Act. 7 Code of Federal Regulations Part 658.
- Mann & Brack, 2006 Mann Adam M. and Virgil Brack, Jr., Ph.D. 25 August 2006. 2006 Summer Mist Net Survey for the Federally Endangered Indiana Bat on Camp Dawson Collective Training Facility Kingwood, West Virginia. Prepared by: Environmental Solutions & Innovations, Inc. (ESI).
- Mauney et al., 2001 Mauney, Morris, Amy A. Lee, Darrell Evans, Michael Bishop, and Tully Wilson, 2001, Delineation of Wetlands and Other Regulated Waters of Camp Dawson, WV, U.S. Army Engineer Research and Development Center, Waterways Experiment Station, CEERD-EE-W, Vicksburg, MS.
- NAGPRA Native American Graves Protection and Repatriation Act, Public Law 101-601
- NEPA of 1969 National Environmental Policy Act of 1969; 42 USC 4321
- NGB, 2005 National Guard Bureau (NGB). 2005. Final Programmatic Environmental Assessment of Modularization of Army National Guard Forces. Prepared by National Guard Bureau and U.S. Army Corps of Engineers, Mobile District with assistance from Tetra Tech, Inc. May 2005.
- NGB, 2011 National Guard Bureau (NGB). NGB NEPA Handbook, Army National Guard Bureau. U.S. Army Corps of Engineers – Mobile District. Revised October 2011.
- NHPA of 1966 National Historic Preservation Act of 1966. 16 United States Code 470 *et. seq.*
- NRCS, 2001 Natural Resources Conservation Service. 2001. Soil survey report of CDCTA Army Training Site, U.S Department of Agriculture.

- Preston Co. Bd. Educ, 2006 Enrollment Statistics, accessed 16 February 2007. <http://www.prestonboe.com/statistics/enrollem.html>.
- Schwierjohann et al., 2002 Schwierjohann Jeffrey H., James D. Kiser, and Virgil Brack, Jr. 27 September 2002. Critical Fauna Survey of Camp Dawson Collective Training Facility, Kingwood, West Virginia. Environmental Solutions & Innovations, LLC in association with: Ken Hotopp, Appalachian Conservation Biology.
- Simcoe, 2005 J. Simcoe, 14 November 2005. Personal Communication pertaining to the Running Buffalo Clover.
- Simpson, 2007 Simpson, Duane B., Phase I Archaeological Survey of the Briery Mountain Training Area, Camp Dawson, Preston County, West Virginia. Prepared by AMEC Earth & Environmental for the West Virginia Army National Guard, October 2007.
- Simpson & Scherer, 2006 Simpson, Duane B and Mathia N. Scherer, Cultural Resource Sensitivity Model for the West Virginia Army National Guard Installation at Camp Dawson and Phase I Archaeological Survey of the Briery Mountain Training Area, Camp Dawson, Preston County, West Virginia. Prepared by AMEC Earth & Environmental for the West Virginia Army National Guard.
- SMCRA of 1977 Surface Mining Control and Reclamation Act (SMCRA) of 1977. 33 United States Code (USC) 1234-1328.
- Streets, 2001 Streets, B. P. 2006. Floristic inventory of Camp Dawson Army Training Site, Preston County, West Virginia: second approximation. Natural Heritage Program, Wildlife Resources
- Streets, 2006 Brian P. Streets, Brian P. June 2006. Floristic Inventory of Camp Dawson Army Training Site, Preston County, West Virginia: Second Approximation. West Virginia Division of Natural Resources, Wildlife Resources Section, Natural Heritage Program, Elkins, WV.
- Trapp & Horn, 1997 Trapp, Henry, Jr. and Marilee A. Horn. 1997. Ground Water Atlas of the United States: Delaware, Maryland, New Jersey, North Carolina, Pennsylvania, Virginia, and West Virginia. U.S. Geological Survey HA 730-L
- USACE, 2014 United States Army Corps of Engineers. Waters of the United States. June 2014.
- USACHPPM, 2009 Operational Noise Consultation, No. 52-ON-0Bs3-09. Operational Noise Contours, Briery Mountain Training Range, West Virginia. May 2009.
- U.S. Census Bureau, 1990 U.S. Census Bureau, 1990. Accessed 5 March 2006. <http://factfinder.census.gov>.
- U.S. Census Bureau, 2010 U.S. Census Bureau, 2010. Accessed 13 January 2014. <http://factfinder.census.gov>.
- USEPA, 2001 Environmental Protection Agency, Region 2, Best Management Practices for Lead at Outdoor Shooting Ranges, EPA-902-B-01-001, January 2001 Federal Interagency Committee On Noise (FICON). 1992. Federal

- Agency Review of Selected Airport Noise Analysis Issues. Washington, DC.
- USEPA, 2009 U.S. Environmental Protection Agency. Mid-Atlantic Air Quality: Nonattainment Areas. Accessed 30 April 2009. <http://www.epa.gov/reg3airtd/airquality/nonattain.htm>.
- USFWS, 2014 U.S. Fish and Wildlife Service. July 2014.
- USGS, 1999 U.S. Geological Survey. The USGS-NPS Vegetation Mapping Program. Web page last updated 29 April 1999. <http://biology.usgs.gov/npsveg/>.
- Vanderhorst, 2001 Vanderhorst, Jim. May 2001. Plant Community Classification and Mapping of the Camp Dawson Collective Training Area Preston County, West Virginia. West Virginia Natural Heritage Program, West Virginia Division of Natural Resources.
- Vanderhorst & Streets, 2006 Vanderhorst, J. and B. P. Streets. 2006. Vegetation Classification and Mapping of Camp Dawson Army Training Site, Preston County, West Virginia: Second Approximation. Natural Heritage Program, WV Division of Natural Resources, Elkins, WV.
- WVARNG, 2013 West Virginia Army National Guard (WVARNG) Range Complex Master Plan
- WVARNG, 2009 West Virginia Army National Guard (WVARNG) Camp Dawson Training Facility Master Plan
- WVARNG, 2008 West Virginia Army National Guard (WVARNG) Training Year (TY) 2008 Range Development Plan (RDP) Update
- WVDEP, 2010 West Virginia Division of Environmental Protection. 2010. 303d, impaired streams listing.
- WVDCH, 2014 West Virginia Division of Culture and History. Coordination and Consultation of Three Ranges. July 2014.
- WVDCH, 2009 West Virginia Division of Culture and History. Coordination and Consultation of Three Ranges. February 2009.
- WVDOF, 2009 West Virginia Division of Forestry. 2009.
- WVDNR, 2014 West Virginia Department of Natural Resources, West Virginia Wildlife, Accessed 16 February 2007 <http://www.wvdnr.gov/Hunting/WMA.shtm>.
- WVDNR, 2007 West Virginia Department of Natural Resources, West Virginia Wildlife, Accessed 16 February 2007 <http://www.wvdnr.gov/Hunting/WMA.shtm>.
- WVGES, 1968 West Virginia Geological and Economic Survey. 1968. Geological Map of West Virginia.
- WVNHP, 2007 West Virginia Natural Heritage Program. 2007. Rare, Threatened, and Endangered Species. West Virginia Department of Natural Resources. <http://www.wvdnr.gov/Wildlife/RareSpecList.shtm>.

SECTION 7. LIST OF PREPARERS

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AMEC EARTH AND ENVIRONMENTAL INC.

Marty Marchaterre, Juris Doctor. Mr. Marchaterre is an attorney with 23 years of experience in environmental and regulatory issues.

Jennifer Warf, Environmental Planner. Ms. Warf holds a M.S. in Environmental Studies and a B.A. in Zoology, with over 12 years of experience in NEPA and natural resource assessment documentation.

Erin Robertson, Environmental Scientist. Ms. Robertson holds B.A. in Anthropology, with 7 years of experience in NEPA and cultural and natural resource assessment documentation.

Duane Simpson, Archaeologist. Mr. Simpson holds a M.A. in Anthropology, with over 15 years of experience in archaeology and cultural resource management.

Daniel Conn, GIS Specialist. Mr. Conn holds a B.S. in Geography, with over 8 years of experience in GIS analysis. Mr. Conn's responsibility on this EA was assisting in preparing and developing GIS mapping.

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SECTION 8. AGENCIES AND INDIVIDUALS CONSULTED

8.1 FEDERAL AND STATE RESOURCE AGENCIES

Federal and State resource agencies were consulted in the development of this EA. Copies of IICEP correspondence, including sample data request letters and all agency responses, are included in **Appendix B**. Agencies consulted are listed below:

FEDERAL AGENCIES

US Army Corps of Engineers
Pittsburgh District Corps of Engineers
William S. Moorhead Federal Building
1000 Liberty Avenue
Pittsburgh, PA 15222

US Forest Service
Supervisor's Office - Forest Headquarters
200 Sycamore Street
Elkins, WV 26241

US Fish and Wildlife Service
West Virginia Field Office
Post Office Box 1278
Elkins, WV 26241

US Department of Agriculture
Natural Resources Conservation Service
Kingwood Service Center
425 E Main St Ste 420
Kingwood, WV 26537

STATE AGENCIES

West Virginia Dept. of Environmental
Protection
601 - 57th Street
Charleston, WV 25304

West Virginia Dept. of Environmental
Protection
Office of Explosives and Blasting
601 - 57th Street
Charleston, WV 25304

West Virginia Dept. of Environmental
Protection
Division of Water and Waste Management
601 - 57th Street
Charleston, WV 25304

West Virginia Division of Natural
Resources
Wildlife Resources Section
Capitol Complex, Building 3, Room 812
1900 Kanawha Boulevard, East
Charleston, WV 25305-0664
POC: Curtis I. Taylor, Chief

State Historic Preservation Office
West Virginia Division of Culture and
History
The Cultural Center-Capital Complex
1900 Kanawha Blvd., East
Charleston, WV 25305-0300

West Virginia Soil Conservation Agency
Kingwood Field Office
425 East Main Street, Suite 420
Kingwood, WV 26537

West Virginia University
College of Agriculture, Forestry, and
Consumer Sciences, Division of Forestry
Wildlife and Fisheries Resources Program
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West Virginia Division of Natural
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1110 Railroad Street
P.O. Box 99
Farmington, WV 26571-0099

West Virginia Division of Forestry
1900 Kanawha Blvd
East Charleston, WV 25305

West Virginia Soil Conservation Agency
Monongahela Conservation District
201 Scott Avenue – Vista Del Rio
Morgantown, WV 26508

State Historic Preservation Office
West Virginia Division of Culture and
History
The Cultural Center - Capitol Complex
1900 Kanawha Boulevard East
Charleston, WV 25305-0300

West Virginia University
College of Agriculture, Forestry, and
Consumer Sciences, Division of Forestry
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322 Percival Hall, P. O. Box 6125
Morgantown, WV 26506-6125

8.2 PRIVATE AND NON-PROFIT GROUPS

The following private and non-profit groups were consulted in the development of this EA. Copies of correspondence can be found in **Appendix B**.

Allegheny Wood Products, Inc.
P. O. Box 130
Kingwood, WV 26537

Friends of the Cheat
119 S. Price Street, Suite 206
Kingwood, WV 26537
POC: Keith Pitzer, Executive Director

8.3 NATIVE AMERICAN GROUPS

Consultation for this EA was initiated by the WVARNG in accordance with NEPA, NHPA, NAGPRA, and DoD American Indian and Alaskan Native Policy on 15 January 2009. A list of federally recognized tribes contacted is included below. Copies of correspondence are included in **Appendix B**.

Seneca Nation of Indians
Kathleen Mitchell, THPO
Seneca Nation Tribal Historic Preservation
467 Center Street
Salamanca, NY 14779

St. Regis Mohawk Tribe
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412 St. Rt. 37
Akwesasne, NY 13655

Absentee Shawnee Tribe of Oklahoma
Karen Kaniatobe, THPO
2025 S Gordon Cooper
Shawnee OK 74801

Delaware Tribe of Indians
Dr. Brice Obermeyer (NAGPRA Director, Joe Brooks, Chief)
Department of Sociology and Anthropology
Emporia State University
Roosevelt Hall, Room 121
1200 Commercial, Box 4022
Emporia, KS 66801

Eastern Band of Cherokee Indians
Russell Townsend, THPO
Qualla Boundary Reservation
PO Box 455
Cherokee, NC 28719

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