# Environmental Assessment for The Integrated Cultural Resources Management Plan For Joint Base Myer-Henderson Hall



## Directorate of Environmental Management Joint Base Myer-Henderson Hall

March 2011

## Contents

PURPOSE AND NEED FOR ACTION	4
Purpose and Need	4
Decision	6
DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES	6
Description of the Action	6
Proposed Action or Full Implementation	7
Partial Implementation Alternative	7
'No Action' Alternative	8
AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES	8
Installation Description	8
Resource Areas	9
Air Quality	10
Health and Safety	10
Biological Resources	10
Cultural Resources	11
Hazardous Materials, Hazardous Waste, and Solid Waste	12
Geology and Soils	13
Transportation	13
Infrastructure	14
Water Resources	14
Land Use	15
Noise	15
Conflicts with Federal, State, or Local Land Use Plans, Policies, and Controls	15
Energy Requirements and Conservation Potential	16
Natural or Depletable Resource Requirements and Conservation Potential	16
Irreversible or Irretrievable Commitment of Resources	16
Adverse Environmental Effects that Cannot Be Avoided	16
Relationship between Short-Term Uses of the Human Environment and the Maintenance and	16
Enhancement of Long-Term Productivity	16
Federal Actions to Address Environmental Justice in Minority and Low-Income Populations	16
Cumulative Effects	16

IMPACT COMPARISON	17
Matrix	17
Conclusion	17
Proposed Action or Full Implementation	17
Partial Implementation Alternative	17
'No Action' Alternative	18
APPENDIX A	19
References	19
APPENDIX B	20
Public Notice	20
APPENDIX C	20
Agency Concurrence	20
APPENDIX D	20
1. AR-1 Chapter Six Cultural Resources	20
2. National Historic Preservation Act Sections (NHPA) 106 and 110	20
3. Archaeological Resources Protection Act (ARPA)	20

#### ENVIRONMENTAL ASSESSMENT FOR THE INTEGRATED CULTURAL RESOURCES MANAGEMENT PLAN AT JOINT BASE MYER HENDERSON-HALL, FORT MYER, VIRGINIA

# **INTRODUCTION**

The National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508), Department of Defense (DoD) Directive 4715.9, *Environmental Planning and Analysis* (U.S. Department of Defense 1996), and 32 CFR Part 651, Army Regulation (AR) 200-2, *Environmental Analysis of Army Actions* (Department of the Army 2002), which implements these laws and regulations, direct DoD and Army officials to consider environmental consequences when authorizing or approving Federal actions. Accordingly, this Environmental Assessment (EA) analyzes potential environmental impacts associated with the implementation of the Integrated Cultural Resources Management Plan at Joint Base Myer-Henderson Hall.

This Environmental Assessment (EA) is prepared in accordance with the National Environmental Policy Act (NEPA), its implementing regulations published by the Council on Environmental Quality (40 CFR 1500-1508), and Department of the Army Regulation (AR 200-1), 'Environmental Analysis of Army Actions.' NEPA requires the U.S. Army to consider and document potential environmental impacts of its proposed actions and provide for public and agency participation prior to deciding on the final action.

Significant cultural resources on Joint Base Myer-Henderson Hall (JBM-HH) consist of the Fort Myer Historic District and Quarters 1 both designated a National Historic Landmarks in 1972; and at Fort McNair, the War College was designated a National Historic Landmark in 1972 and the Fort McNair Historic District was determined eligible for the National Register in 1972.

## **PURPOSE AND NEED FOR ACTION**

## **Purpose and Need**

Joint Base Myer-Henderson Hall (JBM-HH), as an entity of the United States Army, is required by Federal laws and regulations to provide appropriate management of the cultural resources that are present on the installation. These Federal laws include requirements for the preservation of historic properties and archaeological sites, requirements that Native American remains and sacred artifacts are treated in a manner agreeable to native tribes, and preservation of the rights of Native Americans to exercise traditional religious practices, which includes allowing access to sacred places located on Federal property. The Department of Defense has established a policy that cultural resources preservation requirements be incorporated into mission activities. Accordingly, the Department of the Army has established regulations for protection and enhancement of the environment, including cultural resources (AR 200 - 1). AR 200-1 establishes policies for the incorporation of cultural resources management into mission activities. AR 200 - 1 directs each installation to prepare an Integrated Cultural Resources Management Plan (ICRMP), which is used to ensure installation compliance with Federal laws for cultural resources. In accordance with Federal laws and AR 200 - 1, JBM-HH prepared such a plan.

JBM-HH has prepared a five year comprehensive Integrated Cultural Resources Management Plan (ICRMP) for the management of its cultural resources on Fort Myer, Henderson Hall, and Fort McNair during the period 2010-2015. The basic objective of the ICRMP is to ensure that the legal requirements for historic preservation are identified and addressed during the planning and implementation of military operations, construction and other mission-essential activities, as well as real property and land use decisions. Because there is no established process for identifying and preserving historic properties according to preservation laws and standards, cultural resources are managed in a reactive and inconsistent manner. At JBM-HH, a significant component of cultural resource management is advocating the incorporation of preservation standards into the planning and development of historic building rehabilitation projects and other activities. To address the lack of integration between historic preservation laws and standards, a policy outlining National Historic Preservation Act (NHPA) Section 106 process was established. However, this document does not address cultural resources management holistically. In particular, there would be no Section 110 compliance. The establishment of a Section 106 policy is a positive step to address the lack of coordination between project planning and historic preservation. Without a current management plan to link historic preservation standards and project planning, project development will continue to be challenging and may result in erosion of historic character at JBM-HH.

This EA assesses the environmental impacts for the implementation of the Integrated Cultural Resources Management Plan (ICRMP). The ICRMP is designed to integrate the entirety of the installations cultural resources program with ongoing mission activities, allow for the ready identification of potential conflicts between the installation's mission and the cultural resources management program, and identify Federal compliance actions necessary to maintain the mission-essential properties and acreage. The ICRMP provides guidance and procedures to enable JBM-HH to meet its legal responsibilities at Fort Myer, Fort McNair and Henderson Hall for identification, evaluation, and protection of cultural resources while causing the least interference with the military mission. This EA will evaluate the proposed action and two alternatives. The proposed action or 'Full Implementation Alternative' complies with Army Regulation 200-1, Cultural Resources Management and other federal statutes, regulations, Executive Orders and Presidential Memoranda (Appendix D). Full implementation of the ICRMP is the preferred alternative. The second alternative, the 'Partial Implementation Alternative' would implement only parts of the comprehensive ICRMP, such as implementing Section 106 and not Section 110 to identify potential historic sites. The 'No Action' Alternative would continue to manage the cultural resources without an approved plan.

The purpose of the ICRMP is to provide decision-makers with background information and guidance regarding cultural resources, including historical context, laws, and regulations. The ICRMP provides a management plan that reflects goals and objectives for the installation cultural resources program. The cultural resources program at JBM-HH has been considered by

the Army to be an integral part of the installation; therefore cost-effective, integrated strategies for mission support are required.

#### **Decision**

With the completion of the EA and input from Federal, state, and local agencies and the public, JBM-HH will analyze and evaluate the environmental impacts associated with the Army's proposed action of implementing an ICRMP on Joint Base Myer Henderson-Hall. A decision will be made to determine if implementing the proposed action will or will not constitute a major Federal action significantly affecting the quality of the human environment. If the final conclusion is negative (no significant impacts), a Finding of No Significant Impact (FONSI) will be prepared and signed. If the final conclusion is positive (significant impacts), the preparation of an Environmental Impact Statement (EIS) will be required.

## **DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES**

### **Description of the Action**

The proposed action is the implementation of the recently updated (December 2010) Integrated Cultural Resources Management Plan (ICRMP). The ICRMP is a five-year planning document that incorporates cultural resources programs into mission activities. An ICRMP was prepared in 1999 and has recently been updated. The updated plan will be used by JBM-HH and the Environmental Management Directorate to conduct cultural resources management from the December 2010 to 2015. The ICRMP allows the installation to conserve cultural resources, use established relationships with appropriate agencies, and support the ongoing mission activities at the installation. The plan integrates all plans, programs, and principles of cultural resources management and facilitates installation compliance with cultural resources laws, regulations, and policies.

The ICRMP contains sufficient information for resources management to make informed decisions. The Integrated Cultural Resources Management Plan is a five-year management plan that is internal to the U.S. Army and is designed to integrate the installation Cultural Resources Program with mission activities. The ICRMP is a dynamic planning document that is used to identify, evaluate, and manage cultural resources in accordance with Federal and State laws while providing a direct interaction with the military mission. The ICRMP allows full support of mission-essential activities, while ensuring installation compliance with cultural resources laws. The management plan provides standards, objectives, policies, and procedures for the cultural resources program on the installation. Installation goals for the next five years are outlined in the ICRMP, as well as detailed guidelines for inventory and evaluation of installation property. The ICRMP includes a series of Standard Operating Procedures which have been developed to ensure installation compliance with all applicable laws and regulations. The topics for Standard Operating Procedures include: assessment and mitigation of effects that could potentially impact historic, eligible, or potentially eligible sites or structures; procedures for inadvertent discovery of cultural materials; Archaeological Resources Protection Act (1979) compliance; Native

American Graves Protection and Repatriation Act (1990) compliance and tribal consultation; identification and nomination procedures for historic properties; National Environmental Policy Act (1969) compliance; external coordination with the DC HPO and VA SHPO; and curation of cultural materials. The ICRMP also outlines a preservation and protection plan for cultural resources, including site nondisclosure information (relating to the sensitive nature of site locations). The preservation and protection plan indicates that JBM-HH must protect significant cultural resources with measures for protection such as avoidance, physical protection, and data recovery) and periodically review the sufficiency of the methods.

The primary management objective of the ICRMP is to integrate the legal requirements for cultural resources with installation planning and execution of mission objectives. All actions are coordinated through the Installation Cultural Resources Program. Prior to initiation of any project, organizations on the installation submit work orders to the Directorate of Public Works (DPW). The DEM Cultural Resources Manager reviews all work orders that involve construction, ground disturbance, or renovation for potential impacts to installation cultural resources. Projects that are determined to have a potential impact to cultural resources, including potentially eligible historic structures and archaeological sites, are coordinated through the Virginia State Historic Preservation Office and the DC Historic Preservation Office.

The Army proposes to implement the Integrated Cultural Resources Management Plan at Joint Base Myer-Henderson Hall. This environmental analysis addresses three alternatives, the Proposed Action or Full Implementation, Partial Implementation, and No Action.

## **Proposed Action or Full Implementation**

Under the Full Implementation Alternative, JBM-HH cultural resources would be managed in full compliance with all applicable laws, regulations, and policies as documented in the ICRMP. The primary objectives and benefits of the ICRMP are: 1) compliance with Federal Preservation Law, 2) clarification of personnel roles and responsibilities, 3) establishment of internal and external coordination procedures, 4) establishment of guidelines for inventories/evaluations, and 5) preparation of preservation/protection plans and Standard Operation Procedures. Specifically, the ICRMP will provide guidance for preservation and protecting the large number of historic properties by outlining the compliance process so that regulations are consistently met. The ICRMP provides a systematic plan for identifying and including consulting parties as part of compliance process. As a result of Full Implementation, all cultural, natural, and human resources under JBM-HH's control will receive more consideration and protection than previously afforded.

#### **Partial Implementation Alternative**

Under the Partial Implementation Alternative, only portions of the ICRMP would be implemented. Under Partial Implementation, the following actions would occur: 1) NHPA Section 106 compliance would occur in a reactive mode as projects or work orders are submitted to DEM, 2) little or no consistent compliance of NHPA 110, 3) no established procedures to integrate installation activities with Federal preservation regulations.

#### 'No Action' Alternative

Under the No Action Alternative, the ICRMP would not be implemented. Cultural resources at JBM-HH would continue to be managed under the current Ad Hoc conditions without a guiding management plan to ensure compliance with Federal regulations.

## AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

### **Installation Description**

The former Fort Myer Military Community, consisting of Fort Myer in Arlington, Virginia, and Fort Lesley J McNair in Southwest Washington DC, was merged with Henderson Hall Headquarters, United States Marine Corps, in Arlington, Virginia to become Joint Base Myer-Henderson Hall October 1, 2009. The mission of Joint Base Myer-Henderson Hall is to serve as the Joint Force Headquarters-National Capital Region and Military District of Washington (JFHQ-NCR/MDW) base support of operations. The installations provide support for the execution of JFHQ-NCR/MDW missions of homeland defense, defense support to civil authorities, and national and international ceremonial, musical and special event missions. Fort Myer developed in the vicinity of Fort Whipple and Fort Cass both Civil War fortifications in the inner and outer rings, respectively, established to protect Washington, DC. Following the Civil War, both earthen fortifications were demolished, however Fort Whipple area was developed to become the Signal School for instruction. Renamed Fort Myer in 1881, the mission was changed transforming the post into a cavalry show place and the home of senior military. The only building extant from the post Civil War era is Building 42, constructed in 1877, following a design by Quartermaster General, Montgomery Meigs; it is located in the historic district in an open space area proposed for a sustainable park.

Today, Fort Myer comprises 243.4 acres in Arlington County, Virginia that overlooks the Nation's Capital and that borders Arlington National Cemetery. While some buildings serve as administrative offices for the military and civilian labor forces that operate and manage Fort Myer, a significant number of structures house support services. These services are in mid-to-late 20<sup>th</sup> century structures located at the south end of the post. At the north end of the post is the historic district which includes a formal parade grounds, Summerall Field, and Whipple Field, the site of the original Civil War fortification. The historic district also contains late 19<sup>th</sup> and early 20<sup>th</sup> century barracks, stables, administration buildings, and quarters that are now the residences of senior general officers. The stables house ceremonial cavalry horses used for funerals at Arlington National Cemetery and ceremonies in Washington, DC. Fort Myer is the home of the 3<sup>rd</sup> Infantry Division (The Old Guard) and The US Army Band.

Henderson Hall comprises 25.6 acres and is located at the south end of Fort Myer. Much of the military reservation was a part of the Arlington Estate of George Washington Park Custis that was gifted to Maria Syphax, a freed slave of George W P Custis. The Syphax land stayed in the Syphax family until it was acquired by the U.S. Government in 1943 for redevelopment and installation of the Women's Marine Reserves, later to become Henderson Hall. On another part of Henderson Hall, the Abbey Mausoleum was erected in 1927. All 19<sup>th</sup> and early 20<sup>th</sup> century buildings have been demolished. Today, Henderson Hall is comprised of late 20<sup>th</sup> century buildings providing support services; A 1999 *Phase I Archeological Resource Reconnaissance of* 

*Selected Portions of The Henderson Hall Marine Corps Facility* states that little if any acreage on which Henderson Hall is located is undisturbed.

Encompassing 107.8 acres, Fort McNair, is situated on Greenleaf Point at the confluence of the Washington Channel (part of the Potomac River) and the Anacostia River. From the 18<sup>th</sup> century, Greenleaf Point was the site of a military fortification that by 1803 had become an arsenal. In the 19<sup>th</sup> century, the peninsula was occupied by the Washington Arsenal and the Federal Penitentiary of Washington, DC. The Penitentiary was the site of the trial of the Lincoln Assassination Conspirators and subsequent execution of four of the conspirators, including Mary Surratt. In the early 1870s, the Federal penitentiary cell block was demolished leaving the east and west ends that had been the Warden and Deputy Warden residences. These buildings were renovated by Washington architect, Adolf Cluss, to be officer's quarters for the Washington Barracks.

In the early 20<sup>th</sup> century the post mission changed again to establish a center for educating and training senior officers. At this time, the arsenal was demolished and entirely new campus was developed following the Beaux Arts design created by McKim, Mead and White. The design included not only a formal site plan but residences and administration buildings. Of these historic properties, the most prominent is the War College sited majestically at the end of the peninsula. Today, Fort McNair is the home of The National Defense University; Military District of Washington; and Company A, 3<sup>rd</sup> U.S. Army Infantry.



Fort Myer, Virginia

Fort McNair, Washington, DC

## **Resource Areas**

The areas of environmental consideration are air quality, health and safety, biological resources, cultural resources, hazardous materials and solid waste, geology and soils, transportation, infrastructure, water resources, land use, noise, socioeconomics, and water resources.

The assessment of potential environmental impacts and the determination of their significance are based on the requirements in 40 CFR 1508.27. Impacts are evaluated at three levels: (1) No impact—no impact is predicted; (2) No significant impact—impact is predicted, but the impact does not meet the intensity/context significance criteria for the specific resource; and (3) significant impact—an impact that meets the intensity/context significance criteria for the specific resource is expected. Analysis of impact significance is determined using compliance standards or best professional judgment.

#### **Air Quality**

Under the Clean Air Act, Federal actions must not cause or contribute to any new violation of air quality standards, increase the frequency or severity of any existing violation, or delay the timely attainment of any air quality standard or interim milestone.

The Virginia Department of Environmental Quality (VADEQ) has issued Fort Myer a synthetic minor permit (i.e., a State Operating Permit (SOP)), while the District Department of Environment (DDOE) has issued Fort McNair a Title V Operating Permit. Currently, the Fort Myer SOP does not include sources at Henderson Hall, but a Form 7 permit modification application is being finalized and will include sources at both Fort Myer and Henderson Hall, as well as revised fuel limits. Both JBM-HH permits include emission limits and/or fuel limits. In regards to the National Ambient Air Quality Standards (NAAQS), Fort Myer, Henderson Hall, and Fort McNair are all in the same air shed and therefore have the same attainment status: moderate non-attainment (N/A) for 8-hr ozone; severe N/A for 1-hr ozone; N/A for particulate matter of less than 2.5 microns for the annual PM 2.5 standard, but in attainment for the 24-hr PM 2.5 standard; maintenance area for carbon monoxide.

The proposed ICRMP will not add any air emission-producing activities to those currently produced at JBM-HH. Under the proposed action full implementation, partial implementation and no action, there would be no impact upon air quality.

#### **Health and Safety**

Implementation of the ICRMP would involve no new construction or activities that would otherwise result in a risk of health and safety to workers or other individuals. Any investigations that would be identified in Installation Restoration Program (IRP) would be coordinated through IRP and the Joint Base Safety Office, which would identify potential risks to workers and outline restrictions to minimize risks to health and safety. Under the proposed action full implementation, partial implementation and no action, there would be no impact upon on health and safety.

#### **Biological Resources**

The natural environment in the vicinity of JBM-HH is limited and primarily located along water bodies, resulting in a diversity of environmental conditions, habitats, and climate. The installation does not provide much natural environment or habitat for wildlife. The setting on Post is urban park-like, with many areas lacking natural habitat Approximately 75 percent of each installation has impervious surfaces, with limited natural resources remaining. Under the proposed action full implementation, partial implementation and no action, there would be no impact upon biological resources.

#### Flora and Fauna.

The majority of native vegetation has been removed from JBM-HH as a result of past development and training activities, replaced by built or impervious surfaces and cultivated trees, shrubs, and grasses. Fort Myer contains some isolated areas of native trees. Recent tree surveys conducted during 2009-2010 identified the species and evaluated the condition of approximately 5,440 trees at Fort Myer, Fort McNair and Henderson Hall. The native tree stands are primarily oak, Virginia pine, maple, gum and hickory with occasional holly and dogwood. Undergrowth is deciduous saplings, briar, and Virginia creeper. Ornamental trees are planted along open manicured grassy areas, roadways and paths. The fauna at JBM-HH includes mammals such as foxes, rabbits, squirrels, possums, and raccoons as well as rodents and song birds, sea gulls, and great blue herons that are able to live in urban areas.

#### Wetlands.

Approximately 1.15 acres of wetlands were identified in three separate areas on Fort Myer. The largest wetland area is a palustrine-forested wetland of approximately 1.05 acres located within the floodplain of an intermittent stream in the southeast corner of the Post (Henderson Hall) The two remaining areas are east of McNair Road (Fort Myer) and total approximately 0.1 acres. There are no known wetlands on Fort McNair according to the National Wetland Inventory Maps.

#### Threatened and Endangered Species.

Research conducted on the Virginia Department of Game and Inland Fisheries Fish and Wildlife Information Service database indicates no instances of state or Federally listed threatened or endangered species within the project area. There are no wildlife or waterfowl refuges located at JBM-HH. The installation is heavily developed and/or includes previously disturbed wildlife areas.

#### **Cultural Resources**

#### Historic Properties.

There are two historic districts and two individually designated historic sites at Fort Myer and Fort McNair. Historical contexts include the Civil War 1861-65(Fort Whipple and Fort Cass), Signal Corps School 1869-1887, Cavalry Period 1887-1942 and Cold War Era 1945-1991. The historic district and Quarters 1 at Fort Myer were designated National Historic Landmarks on November 28, 1972. Roosevelt Hall at Fort McNair was designated a National Historic Landmark on November 8, 1972 and the Fort McNair historic district was determined eligible for the National Register of Historic Places in 1978. In 2010, JBMHH completed a survey of all buildings 50 years or older to include in the Integrated Cultural Resource Management Plan update to be completed in 2011. Historic Property surveys were conducted in 2010 that included Department of Historic Resources Reconnaissance forms along with photographs. At Fort Myer 105 resources were recorded, including 38 resources that are currently located outside of the National Historic Landmark district but are considered eligible for listing on the National Register for Historic Places. VA State Historic Preservation Office concurred with the findings of the survey on December 2, 2010. The District of Columbia Historic Preservation Office concurred with the findings of the survey on November 26, 2010. The preferred alternative will benefit the Cultural Resources Program by providing guidance and procedures for NHPA Section 106 process. Under the proposed action full implementation, there would be no negative impact upon cultural resources, including archaeological resources. Under the partial alternative and 'no action' alternative, Section 110 compliance would be inconsistent and integration of historic preservation standards into development of historic building projects would not occur

resulting in potential negative impacts to cultural resources.



Fort Myer, 1914

#### Archaeological Resources.

The Archaeological Resources Management Plan, Fort Myer, June 2004, identified 10 areas that might have potential historic archaeological resources, three of these areas are part of an archaeological investigation in process as of this report. The report identified two areas of potential pre-historic resources: one area is now part of Arlington National Cemetery and the second area is a field located at the south end of the post. The Archaeological Resources Management Plan, Fort McNair, June 2004 identified 9 areas of archaeological potential.

#### Cemeteries.

There are no known cemeteries on JBM-HH.

#### Hazardous Materials, Hazardous Waste, and Solid Waste

#### Hazardous Materials.

Several Federal agencies oversee various aspects of hazardous material usage. The DOT regulates the safe packaging and transporting of hazardous materials, as specified in 49 CFR Parts 171 through 180 and Part 397. OSHA regulates the safe use of hazardous materials in the workplace in 29 CFR, primarily Part 1910. EPA regulations are found in 40 CFR. Hazardous waste materials are defined in 40 CFR 261.2 as "any discarded material (i.e. abandoned, recycled, or 'inherently waste-like')" that is not specifically excluded. This can include materials that are both solid and liquid (but containerized). Hazardous waste is further defined in 40 CFR 261.3 as any solid waste not specifically excluded that meets specific concentrations or has certain toxicity, ignitability, corrosivity, or reactivity characteristics. Oversight of hazardous

waste issues is provided primarily by the EPA (as mandated by the Resource Conservation and Recovery Act [RCRA]) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and its extension, the Superfund Amendments and Reauthorization Act. Several IRP sites are present on the installations. Activities that could be impacted by IRP sites are coordinated through the Installation Restoration Program of DEM and the Garrison Safety Office to determine if activities on IRP sites require safety and health procedures and if any restrictions are necessary.

#### Solid Waste.

Solid waste from JBM-HH is collected by a solid waste and recycling contractor. Recyclable wastes are segregated for recycling and unrecyclable waste is transported for disposal at a licensed waste facility. Recycling containers are provided by the Directorate of Public Works both within buildings and at outside locations throughout the installation. The custodial staff collects the sorted recyclable materials from the containers inside each building and transfer to specifically designated dumpsters. The solid waste disposal and recycling contractor collects these materials and conducts a final sort at their facility to ensure maximum proceeds from the recycled material. No impacts to solid waste would result from the proposed implementation of the ICRMP since there are no activities associated with the ICRMP that would result in an increase in waste disposal.

The ICRMP does not require the use of hazardous materials and will not result in the generation of solid waste. The ICRMP also takes into account existing CERCLA and RCRA sites in all actions. Under the proposed action, full implementation, partial implementation or no action, there would be no impact upon Hazardous Materials and Solid Waste.

#### **Geology and Soils**

Fort Myer in Arlington, Virginia is located just north of the Fall Line, which is the boundary of the Upper Coastal Plain and the Northern Piedmont Physiographic zones; soils include Urban land in the Sassafras, Sassafras-Neabsco, and Glenelg complexes. Fort McNair, Washington, DC, is located on a peninsula at the confluence of the Potomac and Anacostia Rivers. Fort McNair is constructed on land characterized by man-made fill and alleviant and terrace deposits. Implementation of the ICRMP would not erode geology and soils. Under the proposed action, full implementation, partial implementation or no action, there would be no impact upon geology and soils.

#### **Transportation**

The Greater Washington Region features an extensive transportation system, including three airports, two major ports, Amtrak, commuter rail lines, metro rail lines, bus systems, and regional interstates I-95, I-66, and I-70 connecting the region to other major cities. The primary circulation within Fort Myer is along four north-south transit corridors with minor streets running laterally in an east-west direction to create a staggered grid pattern of irregular formed blocks. The primary circulation within Fort McNair consists of two major entry points connecting to (one-way) streets running north-south with minor roads running east-west.

Implementation of the ICRMP would add no traffic increasing activities to the present levels on the installation and would not include any interruptions to the roadway systems. There will be no impact to existing transportation as a result of the proposed ICRMP.

#### Infrastructure

There will be no impact to the infrastructure as a result of full implementation or the alternatives of the ICRMP.

#### Electric Power.

Electricity is supplied to Fort Myer and Henderson Hall by Dominion Virginia Power (DVP), who owns the existing electricity system. At Fort McNair electricity is supplied by PEPCO but the lines are owned by DVP. Implementation of the ICRMP would add no new usage to the electrical service.

#### Natural Gas.

Washington Gas is the owner and supplier of natural gas to JBM-HH. The natural gas supply is of sufficient capacity to support installation activities; the proposed action would add no new usage to the natural gas supply.

#### Wastewater Treatment.

Fort Myer owns the sanitary system on the post and the supplier of sanitary services is Arlington County Sewer. Fort McNair owns the sanitary sewer system on post; the wastewater is treated off-post at the DC WASA Blue Plains Wastewater Treatment Plant. No wastewater treatment plant is located on JBM-HH. All wastewater is collected in sanitary sewers and discharged to a wastewater treatment plant located in Arlington County and DC WASA Blue Plains Wastewater Treatment Plant.

#### Water Resources

#### Drinking Water.

Potable water is delivered to Fort Myer by the Arlington County water system, which is fed by the Potomac River after being treated at the Dalecarlia Water Treatment Plant by the Washington Aqueduct Division (WAD), an agency of the Army Corps of Engineers (USACE). Potable water is delivered to Fort McNair by the District of Columbia Water and Sewer Authority (DCWASA).

#### Surface Water.

JBM-HH is situated within the Chesapeake Bay Preservation Area and Resource Protection Areas (RPAs), corridors of environmentally sensitive land lying alongside streams or other waterways which drain into the Potomac River and eventually into the Chesapeake Bay, have been identified at Joint Base Myer-Henderson Hall. There are no jurisdictional waters present at JBM-HH. An unnamed stream is located along the southwestern border of Fort Myer/Henderson Hall. This stream is a tributary of Long Branch Creek, which is a tributary to Four Mile Run and the Potomac River. Fort McNair is located on a peninsula at the confluence of the Potomac and Anacostia Rivers. There are no surface water features on the land area at Fort McNair.

#### Floodplain.

Fort Myer and Henderson Hall lies outside the 100-year flood plain. The southwest portion of Henderson Hall has experienced recurring flooding in the past. At FEMA's recommendation, the 10-foot elevation contour line is used to define the 100 Year Storm at Fort McNair, therefore the total area covered 100-year flood plain is 11.7 acres.

#### Land Use

There are seven categories of land use at JBM-HH: Professional/Institutional, Residential, Community, Troop, Industrial, Ranges and Training. The Fort Myer and Fort McNair historic district boundaries are shown on the land use map. All actions and activities for potential impacts to cultural resources, including ground disturbing activities or renovations to structures that are potentially eligible for the National Register of Historic Places, are reviewed by the Cultural Resources Manager. Any actions that are determined to potentially affect cultural resources are coordinated with the SHPO. The SHPO will review each action and specify the scope and level of effort required to avoid any adverse effects. The proposed implementation of the ICRMP will not impact the installation land use.

#### Noise

Currently, JBM-HH is in compliance with local noise ordinances. The proposed ICRMP will not add any new noise-producing activities to those currently produced on the installation. There will be no impact as a result of full implementation or the alternatives for the ICRMP.

#### **Socioeconomics**

The Federal government and tourism are the principal economic drivers for the region. Greater Washington, DC has a diverse economy including professional services, information technology firms, biotech industries, national and international non-profit groups and assorted associations. JBM-HH is a key member of the Military District of Washington (MDW) which serves in defense of the National Capital Region and carries out ceremonial activities including funeral services, musical events, and parades.

No permanent jobs would be added as a result of the proposed ICRMP; however, compliance with Section 110 may create some temporary jobs for the local economy, a positive benefit of full implementation of the action. There will be no negative impact as a result of full implementation or the alternatives for the ICRMP.

#### Conflicts with Federal, State, or Local Land Use Plans, Policies, and Controls

The proposed implementation of the ICRMP would allow mission-essential activities to continue while providing a method for ensuring compliance with all applicable Federal, State, and local cultural resources laws. Since all activities that could result in a potential impact to installation cultural resources are coordinated with appropriate Federal and State agencies, conflicts with Federal, regional, state, or local land use plans, policies, or controls would not be anticipated.

#### **Energy Requirements and Conservation Potential**

There is no energy requirements associated with the implementation of the ICRMP. There will be no impact as a result of full implementation or the alternatives for the ICRMP.

#### Natural or Depletable Resource Requirements and Conservation Potential

There are no natural or depletable resources associated with the implementation of the ICRMP. There will be no impact as a result of full implementation or the alternatives for the ICRMP.

#### Irreversible or Irretrievable Commitment of Resources

There would be no irreversible and irretrievable commitment of resources that would result from the implementation of the ICRMP. There will be no impact as a result of full implementation or the alternatives for the ICRMP.

#### **Adverse Environmental Effects that Cannot Be Avoided**

Implementation of the ICRMP would not result in any adverse environmental effects that cannot be avoided. There will be no impact as a result of full implementation or the alternatives for the ICRMP.

## Relationship between Short-Term Uses of the Human Environment and the Maintenance and Enhancement of Long-Term Productivity

The implementation of the ICRMP will be undertaken in accordance with the JBM-HH *Master Plan (AMCOM 1994)* and the proposed 2009 Master Plan both of which provides a management tool to aid in making operational support decisions by incorporating the concept of comprehensive planning. There will be no impact as a result of full implementation or the alternatives for the ICRMP.

#### Federal Actions to Address Environmental Justice in Minority and Low-Income Populations

No minority or low-income populations exist within the proposed project area or within JBM-HH. There will be no impact as a result of full implementation or the alternatives for the ICRMP.

#### **Cumulative Effects**

No cumulative effects are expected to result from the proposed implementation of the ICRMP. The ICRMP will ensure compliance with all applicable Federal and State cultural resources laws while allowing mission-essential activities to continue. There will be no impact as a result of full implementation or the alternatives for the ICRMP.

## **IMPACT COMPARISON**

#### **Matrix**

Environmental Impact Matrix				
Environmental Components	Proposed Action	Partial	No-Action	
		Alternative	Alternative	
Air Quality	No Impact	No Impact	No Impact	
Health Safety	No Impact	No Impact	No Impact	
Biological Resources	No Impact	No Impact	No Impact	
Cultural Resources	No Negative Impact	No Impact	No Impact	
Hazardous Materials/Solid	No Impact	No Impact	No Impact	
Waste				
Geology and Soils	No Impact	No Impact	No Impact	
Transportation	No Impact	No Impact	No Impact	
Infrastructure	No Impact	No Impact	No Impact	
Water Resources	No Impact	No Impact	No Impact	
Land Use	No Significant Impact	No Impact	No Impact	
Noise	No Impact	No Impact	No Impact	
Socioeconomics	Some Positive Impact	No Impact	No Impact	
Water Resources	No Impact	No Impact	No Impact	

## Conclusion

## **Proposed Action or Full Implementation**

The proposed action is to implement an Integrated Cultural Resources Management Plan at JBM-HH during the period 2010 through 2015. The ICRMP is designed to be a component of the installation Master Plan, to complement other JBM-HH plans and to serve as the installation's decision document for implementing cultural resource management actions. The ICRMP will ensure: 1) that the JBM-HH personnel make informed decisions regarding the cultural resources under their control, resulting in more effective and efficient management of cultural resources; 2) compliance with public laws; 3) support the military mission; and 4) consistency with sound principles of cultural resources management. Cultural resources at JBM-HH include historic districts and properties, such as buildings, objects, and structures from the 19<sup>th</sup> and 20<sup>th</sup> Centuries. The Proposed Action is the preferred Alternative.

## **Partial Implementation Alternative**

This alternative would be to implement only selected parts of the National Historic Preservation Act focusing on Section 106 but not compliance of NHPA Section 110. This alternative would result in no cohesive plan with vision for the total cultural resources responsibility and

compliance with applicable regulations. Partial Implementation would perpetuate a lack of integration between preservation standards and practices at JBM-HH. Further, it would not meet AR 200-1 regulations requiring development and implementation of an ICRMP

## 'No Action' Alternative

The 'No Action' Alternative would maintain the status quo management for cultural resources on JBM-HH. Currently, cultural resources are managed on an ad hoc approach without a plan to guide consistent goal driven policy. The 'No Action' Alternative is not in compliance with AR 200-1 which requires each installation to prepare and implement an ICRMP.

No action will result in continuation of inconsistent and reactive implementation of historic preservation regulations. Lack of established procedures through the implementation of the ICRMP does not meet Army regulations AR 200-1. There may be some environmental impact with continuing the status quo or 'No Action' Alternative on JBM-HH.

## Conclusion

Full implementation of the ICRMP would have a minimal effect on the environment. Potentially, there could be some impact if the partial or no action alternatives are implemented as some resources could potentially be inappropriately altered or changed, eroding their historic integrity. However, based upon the analysis contained in the EA, it is determined that the known and potential impacts of the proposed action on the physical, cultural and natural environment would be positive. Full Implementation would result in the most efficient and effective management of cultural resources and would bring the installation in compliance with AR 200-1 (6-4 Program requirements).

## **APPENDIX A**

## References

U.S. Army Center for Health Promotion and Preventive Medicine. Fort Myer Military Community. *Integrated Solid Waste Management Plan*, May 2009.

URS Group, Inc. Environmental Protection and Enhancement Hazardous Waste Management Plans, U.S. Army Garrison Fort Myer Military Community, December 2008.

PBS&J. Joint Base Real Property Master Plan, 2010.

Thunderbird Archaeological Associates, Incorporated. *Phase I Archaeological Resources Reconnaissance of Selected Portions of the Henderson Hall Marine Corps Facility, Arlington County, Virginia, January 1999.* 

John Milner Associates, Inc. Archeological Investigations Radnor Heights Substation and Transmission Line Joint Base Myer-Henderson Hall (Fort Myer) Arlington, Virginia, January 2011.

URS Group, Inc. Archaeological Resources Management Plan Fort McNair, Washington, DC, June 2004.

URS Group, Inc. Archaeological Resources Management Plan Fort Myer, Washington, DC, June 2004.

Army Regulation 200-1, Environmental Protection and Enhancement, February 21, 1997.

Army Regulation 200-2, *Environmental Analysis of Army Actions*, Federal Register Vol. 67, No. 61, March 29, 2002.

Army Regulation 200-4, Cultural Resources Management, October 1, 1998.

URS Group, Inc. *Stormwater Pollution Prevention Plan For Joint Base Myer-Henderson Hall, Arlington, Virginia*, September 2009.

## **APPENDIX B**

## **Public Notice**

## **APPENDIX C**

**Agency Concurrence** 

## **APPENDIX D**

- 1. AR-200-1 Chapter Six Cultural Resources
- 2. National Historic Preservation Act Sections (NHPA) 106 and 110
- 3. Archaeological Resources Protection Act (ARPA)