

SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS [TABS FINAL VERSION]

SCENARIO #MED-0002R TITLE: MED-0002R CLOSE WALTER REED ARMY MEDICAL CENTER

GENERAL DESCRIPTION: Close Walter Reed Army Medical Center. Property released for other uses. Realign Education and Training functions to Bethesda National Naval Medical Center. Realign Inpatient functions to Bethesda NNMC and Ft. Belvoir. Realign outpatient functions to Andrews AFB, Fr. Belvoir, Bethesda NNMC and Quantico MCS. Expand Ft. Belvoir outpatient and inpatient functions. Expand Quantico MCX outpatient services.

Notes:

- 1). Approximately 2,300 personnel moving to Ft. Belvoir; approximately 700,000 SF new MILCON required.
- 2). Approximately 800 personnel moving to National Naval Medical Center, which is DON-owned, so impacts are not assessed in this SSEI.
- 3). Approximately 150 personnel moving to Fort Sam Houston; approximately 69,000 SF new MILCON required.
- 4). Approximately 25 personnel moving to Aberdeen; approximately 2,000 SF new MILCON required.
- 5). Approximately 80 personnel moving to Fort Detrick; approximately 12,000 SF new MILCON required.
- 6). Walter Reed Medical Center closes.

ANALYST: _____

DATE: 28 APRIL 2005

Env Resource Area	#1 Gaining Installation Assessment Inst Name: Ft Belvoir	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Potential Impact due to Non-Attainment status for Ozone (8-hour) and PM 2.5. Air Conformity Analysis required due to increase in population and vehicles. New Source Review required due to new construction.	#213 –Moderate Non-Attainment for Ozone (1-hour), proposed/projected for Non-Attainment for Ozone (8-hour) and PM2.5. #211 - No permit thresholds projected to be exceeded (based on 2% move from Aberdeen and no emissions from ATEC) #220 – Has a Major Title V Permit and (Natural) Minor Operating Permit. #218/ISR – No mission impact/No restr.
Cultural/Archeological/Tribal Resources	No Impact. New construction will need to take into account location of historic/prehistoric sites that restrict construction. Cultural / archeological / tribal resources currently restrict operations. Additional operations may impact these resources and result in further restrictions on training or operations. Potential impacts may occur, since resources must be evaluated on a case-by-case basis.	#230/231/233- 100% surveyed with historic/prehistoric sites that restrict future construction in certain areas. No native peoples sites. #232-No areas with high potential for archaeological resources identified #235 - 58 historic properties #201 – No mission operations constraints. #234 – No tribes interested in resources. #236 – No Programmatic Agreement.
Dr ed g .in g	No Impact.	
Land Use Constraints/Sensitive Resource Areas	Likely no Impact. Although incoming population is moderate (2,300), future encroachment around the installation is expected to further adversely impact mission on the installation.	Buildable Acres –approx 174 req'd (based on 4 X large admin org), approx 2,355 acres available. #201, 254– No restrictions/coordination required. #256 – One Sensitive Resource Area that restricts airspace. CERL Encroachment Study – On list of installations experiencing significant encroachment

Marine Mammals / Marine Birds	No Impact.	
Noise	No Impact.	#239 - No noise contours off-installation. SIRRA – Identified as installation with significant noise sensitivity.
Threatened & Endangered Species / Critical Habitat	No Impact. TES on installation include the Bald Eagle and currently cause restrictions. Additional operations may further impact TES leading to additional restrictions on operations.	#249 Restrictions for TES are in place – no clear cutting or training 750 feet inland along undisturbed and undeveloped shoreline. Restricted helicopter flying. #259 1 TES identified, Bald Eagle #260-262,264 - No habitat restrictions, no proposed critical habitat #263 – No candidate species; ISR2 shows no impact.
Waste Management	No Impact.	#269 –No RCRA Subpart X Permit or on-site disposal facility, but does have permitted RCRA TSDF
Water Resources	No Impact.	#276,278 – No restrictions #279 - Doesn't discharge to imp waterway. #293 – No water use restrictions have been reported #824/825 indicates adequate water avail IREM – potable water infr. can support 19,000 more people #282 – No industrial wastewater treatment plant #291- 1 Off Military Installation Commercial Source for potable water #282-no industrial wastewater facility #297- 1 Off Military Installation Commercial Source for sewage treatment
Wetlands	No impact. Land outside of wetlands is available for construction. Wetlands already restrict operations. Additional operations may impact wetlands, which may lead to operations that are restricted.	#251 – Installation was surveyed in 97 #257 – 10.2% of installation has wetlands that restrict operations, permits needed if planning to disturb wetlands.

Env Resource Area	#2 Gaining Installation Assessment Inst Name: Ft. Sam Houston	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact.	#213 –In Attainment for all criteria pollutants #211 – No exceedences reported #220 – Holds 1 Minor Operating Permit (Natural Minor) #218 – No mission impact indicated
Cultural/Archeological/Tribal Resources	Cultural / archeological / tribal resources currently restrict operations. Additional operations may impact these resources and result in further restrictions on training or operations. A potential impact may occur as a result of increased time delays and negotiated restrictions. Potential impacts may occur, since resources must be evaluated on a case-by-case basis. Sufficient buildable acres should exist to accommodate new construction while avoiding cultural resources.	#233- 80% of installation has been surveyed for cultural resources #235 –895 Historic props identified #230 – 344 arch resources reported on installation w/no restrictions (Camp Bullis) #231 – No Native People sites identified #236 – No Prog. Agreement with SHPO #234 – 4 non-local tribes assert interest, in formal consultation #232 – Areas with high archaeological potential identified. ISR2-No adverse impact to mission
Dredging	No impact	Dredging is not part of the proposal and there are no impediments to dredging.
Land Use Constraints/Sensitive Resource Areas	No impact	#30 – 1,176 BA available – 20 required (based on 2.9 X small admin orgs) #201 – No constraints reported #256 – No Sensitive Resource Areas identified
Marine Mammals/Marine	No impact	
Noise	No impact	#239 –No noise contours off installation.
Threatened& Endangered Species/Critical Habitat	No impact. 5 TES on installation include Golden Checked warbler, Black-capped vireo, Madla’s cave meshweaver, Rhadine exilis, and Rhadine infernalis. Impact range areas. TES already restrict operations. Additional operations may further impact TES leading to additional restrictions on operations.	#259 – 5 TES species with impact to range areas. Species are Golden Checked warbler, Black-capped vireo, Madla’s cave meshweaver, Rhadine exilis, Rhadine infernalis. #260 – No critical habitat identified #261 – 3 Biological Opinions; 1 imposes restrictions on water pumped from Edwards aquifer. #262 – No development restrictions reported. #263 No candidate species; ISR2 shows no impact #264 – No candidate species/habitat reported
Waste Management	No impact.	#269 –Installation has RCRA Subpart X OB/OD Permit #265- Has RCRA TSD facility. #272 – Not a permitted solid waste disposal facility

Water Resources	<p>No impact. Installation located over a sole-source aquifer – may result in future regulatory limitations on training activities.</p> <p>Water quality is impaired by pollutant loadings. Current operations may contribute to impaired water quality. Significant mitigation measures to limit releases may be required to reduce impacts to water quality and achieve US EPA water quality standards.</p>	<p>#276 – Installation located over a sole-source aquifer #278 – McCarren Amend does not apply #293 –Water use restrictions have been reported (2000, 2002) – water conservation #824/825 indicates adequate water avail. IREM –potable water infrastructure can support approx. 143,000 more people #279 –Installation does discharge to impaired waterway but does not impair waterway #282 – No Industrial wastewater treatment system 291-3 On Military Installation Govt Owned Plants for potable water 297-2 On Military Installation Govt Owned Plants and 1 Off Military Installation Publicly Owned plant for sewage treatment.</p>
Wetlands	No impact	<p>#251- Survey completed 9/99. #257 – 1% of installation has restricted wetlands</p>

Env Resource Area	#3 Gaining Installation Assessment Inst Name: Aberdeen Proving Ground	Analyst Comments (& data source(s) that drive assessment)
Air Quality	<p>Impact Expected.</p> <p>APG is currently in Non-Attainment area for Ozone. Addition of operations may exceed major source thresholds for NOx and VOCs. Added operations will require New Source Review permitting and Air Conformity Analysis.</p>	<p>#213, 219 – In non-attainment for Ozone (EPA web site confirms non-attainment for Ozone 8-hour)</p> <p>#211 – Projected to exceed Major Source thresholds for Nox.</p> <p>#212-No threshold exceedences reported</p> <p>#220 – Holds 2 Major Operating Permits (SIC code 9711)</p> <p>#222 – Emissions Credit Trading program available for NOx and VOCs</p> <p>#218 – No restrictions to operations reported due to air quality requirements</p>
Cultural/Archeological/Tribal Resources	<p>78 Historic properties, 5 archeological resources identified to date and areas with high archeological potential, but no restrictions to mission reported.</p> <p>A very limited portion of the installation has been surveyed for cultural resources; therefore, the extent of the cultural resources on the installation and impacts to those resources is uncertain. Potential impacts may occur as result of increased times delays and negotiated restrictions, due to tribal government interest. Potential impacts may occur, since resource must be evaluated on a case-by-case basis, thereby causing increased delays and costs. Likely no impact. Sufficient buildable acres exist to accommodate minimal new construction while avoiding cultural/historic resources.</p>	<p>#233- A very limited portion of the installation has been surveyed for cultural resources (<5%) therefore the extent of cultural resources on the installation and impacts to these resources is uncertain.</p> <p>#235 – 78 Historic properties identified</p> <p>#229 – No known limitations to fee-simple ownership</p> <p>#230 – 5 archeological resources known on installation; no restrictions reported</p> <p>#231 – Native People sites identified</p> <p>#236 – No Programmatic Agreement with SHPO</p> <p>#201 – Operations are not restricted due to cultural/archaeological/tribal resources however, these resources were identified.</p> <p>#234 – 5 tribes have asserted interest in burial/sacred sites; in contact, but no formal consultation yet.</p> <p>#232 – Areas with high archaeological potential identified.</p>
Dredging	<p>No Impact. If the new unit/activity requires dredging, then UXO and endangered species surveys may be required.</p>	<p>#227 – If new unit/activity requires dredging, then dredging may not be able to occur in the short term due to known dredging impediments.</p> <p>#226 – If the new unit/activity requires dredging, then UXO and endangered species surveys may be required.</p>

<p style="text-align: center;">Land Use Constraints/Sensitive Resource Areas</p>	<p>No Impact.</p> <p>Four SRAs identified but cause no restrictions.</p>	<p>#30 – 2,863 buildable acres reported, minimal required.</p> <p>#201 - Constraints listed include (4) limited ability to accept new or different missions due to availability of unconstrained land, (5) altered, modified or re-routed flight operations and/or flight patterns and (6) altered, modified or re-routed ground operations.</p> <p>#256 – 4 Sensitive Resource Areas identified but cause no restrictions</p> <p>CERL– Moderate Encroachment</p>
<p style="text-align: center;">Marine Mammals/Marine Resources/ Marine Sanctuaries</p>	<p>No impact.</p>	<p>#248, #250, #252, #253 - No restrictions</p> <p>#249 – TES listed include Shortnosed Sturgeon (<i>Accipenser brevirostrum</i>) (restricting Poole's Island Shoal waters around island) and Bald Eagle (<i>Haliaeetus leucocephalus</i>), (restricting Poole's Island areas near nest sites, APG Shoreline & Areas near nest sites- affecting 17.2 acres of installation)</p>
<p style="text-align: center;">Noise</p>	<p>No impact. No noise expected to be generated by this proposal.</p>	<p>#239 – 235,848 acres of Noise Zone 2 extend outside installation, which is not highly encroached by development.</p> <p>#202 – Installation has published noise abatement procedures for main installation and training range but not for auxiliary airfield.</p>

<p>Threatened & Endangered Species/Critical Habitat</p>	<p>Installation has Federally listed species (Shortnosed Sturgeon, Bald Eagle), that affect 17.2 acres of the installation and restricts night time flying operations (protection buffers around nests) on 7.9% of installation.</p> <p>TES already restrict operations. Additional operations may further impact threatened/endangered species leading to additional restrictions on training or operations.</p>	<p>#249 – TES listed include Shortnosed Sturgeon (<i>Accipenser brevirostrum</i>) (restricting Poole's Island Shoal waters around island) and Bald Eagle (<i>Haliaeetus leucocephalus</i>), (restricting Poole's Island areas near nest sites, APG Shoreline & Areas near nest sites- affecting 17.2 acres of installation)</p> <p>#259 – TES listed include Shortnosed Sturgeon (<i>Accipenser brevirostrum</i>) and Bald Eagle (<i>Haliaeetus leucocephalus</i>). The Bald Eagle has delayed operations due to protection of buffers around nests during nesting season on approximately 7.9% of installation.</p> <p>#260 – No critical habitat identified</p> <p>#261 – Biological Opinion for Bald Eagle restricts range operations</p> <p>#262 – Development restrictions reported. Eagles: Existing Biological Opinions have limited impacts as they impose a monitoring responsibility primarily; some sites are protected. The ongoing Biological Assessment and subsequent Opinion will include an incidental take statement and some mitigation limits for some of the SOCOM training functions is expected. The extent of the limits is unclear, as the BA is still in development.</p> <p>Sturgeon: APG has a BA and BO from NOAA containing no limitations. APG is to coordinate with them if specific projects pose a risk.</p> <p>#263, #264 – No candidate species/habitat reported</p> <p>#201 - TES have restricted operations by limiting night flying times.</p>
<p>Waste Management</p>	<p>No impact.</p>	<p>#269 – Interim RCRA Subpart X OB/OD Permit, Permit has been submitted</p> <p>#265- Installation is a permitted hazardous waste RCRA Treatment Storage and Disposal (TSD) facility.</p> <p>#272 – Not a permitted solid waste disposal facility</p>

Water Resources	<p>Minimal impact expected.</p> <p>Water quality is impaired by pollutant loadings. Significant mitigation measures to limit releases may be required to reduce impacts to water quality and achieve US EPA water quality standards.</p>	<p>#276 – Installation not located over a sole-source aquifer</p> <p>#278 – McCarren Amendment does not apply</p> <p>#293 – Potable water restrictions in FY99 (33 days), FY01 (134 days) and FY02 (147 days). Source restrictions to prevent exceeding withdrawal permits, FY99 (9% of time restriction in place), FY01 (37%), FY02 (40%) from CHPPM Water Resources Report.</p> <p>#291 – Installation uses one Gov’t owned on-installation plant and one publicly owned off-installation plant for potable water.</p> <p>IREM indicates capacity for potable water to support 33,500+ personnel</p> <p>#279 – Installation discharges to impaired waterway; nutrient discharges from installation further impair waterway but is not a source of potable water.</p> <p>#297 – Two Sewage treatment plants on site; 1 government owned, 1 privatized.</p> <p>#282 – Industrial Government owned wastewater treatment system located on installation.</p> <p>#822, 824, 825, 826, ISRII – no restrictions reported</p>
Wetlands	No impact.	<p>#251- Survey completed 04/92.</p> <p>#257 – Wetlands affect 0.3% of range and installation each but do not restrict operations.</p>

Env Resource Area	#4 <i>Gaining</i> Installation Assessment Inst Name: Ft Detrick	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Significant impact. Currently in serious Non-Attainment for O3. Added operations may exacerbate major source threshold exceedance problems for NOx. A New Source Review and Air Conformity analysis will be required as well as modifications to existing Title V Permit.	#213 – Severe Nonattainment for O3 (1 hr); no emission credits may be available, No SIP growth allowance #211 - Major source threshold already being exceeded for NOx and SO2 - additional NOx emissions may exacerbate problem #220 - Major Operating Permit. #218/ISR - No mission impact indicated.
Cultural/Archeological/ Tribal Resources	Impact not likely. 2 Archeological sites require special procedures if items are found during construction, but limited only to 2 sites. Potential impacts may occur as result of increased times delays and negotiated restrictions, due to tribal government interest. Potential impacts may occur, since resource must be evaluated on a case-by-case basis, thereby causing increased delays and costs.	#230 – 2 Archeological sites restrict future construction at site, but no restrictions to tng/opns reported; #231 - No Native peoples sites; #233, 100% surveyed #234-No tribal interest #235- 5 historic properties #236 - No programmatic agreement ISR2 - No adverse impact to mission.
Dredging	No Impacts	Dredging is not part of proposal and there are no impediments to dredging.
Land Use Constraint s/Sensitive Resource Areas	No impacts	Buildable Acres - approx 3.5 acres req'd (based on approximately 1/2 small admin organization) with 81 acres available. #201, 254, 256 - no restr. CERL - minimal encroachment
Marine Mammals	No Impacts	
Noise	No Impacts	#239 - No noise contours off-installation.
Threatened & Endangered Species/ Critical Habitat	No Impacts	#249 No restrictions associated with TES, etc. #259 No TES, Candidate species, #260-262,264 - No habitat restrictions, no proposed critical habitat #263 – No candidate species; ISR2 shows no impact.
Waste Management	No Impacts.	#269-No Subpart X Permit. #265-No Permitted TSDF Facility. #272-Permitted SWDF, 28% filled

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Water Resources</p>	<p>No Impacts.</p>	<p>#276,278 – No restrictions #293 – Water use restrictions have been reported (2002) #824/825 indicates adequate water avail IREM – potable water infrastructure can support approx 2,000 more people #279 - Doesn't discharge to imp waterway. #282 – No industrial wastewater treatment plant #291 - 1 On Military Installation Govt Owned Plant for potable water 297- 1 On Military Installation Govt Owned Plant for sewage treatment</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Wetlands</p>	<p>No Impacts.</p>	<p>#257 – 1.1% of installation has restricted wetlands – must also consider lead runoff from ranges into wetlands. Cannot expand installation.</p>

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED)
SCENARIO #MED-0002R

Env Resource Area	<i>Lossing</i> Installation Assessment Inst Name: Walter Reed Medical Center	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact	#213 –Severe Non-Attainment for Ozone (1-hour and 8-hour) #211 – Over major source threshold and permitted limit for Nox – no other permit limits reported. #220 – Has a One Major Operating Permit and one Synthetic Minor Operating Permit –SIC codes 8062 #218/ISR – No mission impact/No restr.
Cultural/Archaeological/ Tribal Resources	No Impact. Consultation with SHPO will be required to ensure protection of cultural resources at the installation.	#230, #231, #232- N/A #233- 0.1% surveyed #235 - 55 historic properties on 95 acres #201 – No mission operations constraints. #234 – N/A #236 – Prog. Agreement in place
Drinking	No Impact.	
Land Use Constraints/Sensitive Resource Areas	No Impact.	Buildable Acres - 3.3 acres available. #201, 254– No restrictions/coordination required. #256 – One Sensitive Resource Area – restricts ops on 40% of installation – Public Use Only CERL Encroachment Study – low to moderate encroachment #240- \$231K spent through FY03, estimated CTC \$449K. DERA lists CTC at \$755K
Marine Mammals/Marine	No Impact.	
Noise	No Impact.	#239 – N/A SIRRA – Identified as installation with significant noise sensitivity.
Threatened & Endangered	No Impact.	#259 –264 N/A
Waste Management	No Impact.	#269 & 272 – N/A #265 – No TSD Facility #273 –N/A

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Water Resources</p>	<p>Environmental media contamination issues at the installation include: Trichloroethylene (TCE), Tetrachloroethylene (PCE), Petroleum Hydrocarbons, and Polychlorinated Biphenyls (PCBs) in groundwater.</p>	<p>#276- Not over sole source aquifer # 278 – Not subject to McCarren Amend #279 – N/A #293 – N/A #282 – N/A #275- Ground water contamination includes Trichloroethylene (TCE), Tetrachloroethylene (PCE), Petroleum Hydrocarbons, and Polychlorinated Biphenyls (PCBs). – None in potable water source. #281- No surfacewater contamination.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Wetlands</p>	<p>No impact.</p>	<p>#251, #258 – N/A</p>

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED)

SCENARIO #MED-0002R

IMPACTS OF COSTS

Env Resource Area	Gaining Installations Inst Name: Ft Belvoir, Fort Sam Houston, Aberdeen, Fort Detrick	Losing Installation Inst Name: Walter Reed Army Medical Center
Environmental Restoration*	None	DERA CTC- \$755K
Waste Management	None	None

<p>Environmental Compliance</p>	<p><u>Fort Belvoir:</u> -Endangered Species Management (incl monitoring) - \$20K-\$2M -Air Conformity Analysis -\$25K-\$75K -New Source Review -\$100K-\$500K -Re-alignment NEPA at gaining base - \$400K (incoming population >1,000) -Develop Programmatic Agreement - \$10K -Endangered Species Management (includes monitoring) - \$20K-\$2M</p> <p><u>Fort Sam Houston:</u> -Develop PA -\$10K -Tribal gov't-to-gov't consultation -\$500-\$2K per meeting -Realignment NEPA at gaining base -\$100K (EA) based on incoming pop <1,000 -Endangered Species Management (includes monitoring) - \$20K-\$2M - Install Best Management Practices to protect impaired waterways and reduce source runoff from training areas and ranges - \$100K-\$3M</p> <p><u>Aberdeen:</u> -Air Conformity Analysis - \$25K-\$75K -New Source Review Analysis and -Permitting - \$100K-\$500K -Archeological/tribal resources inventory - \$25-\$100 per acre. - Historical building/structure inventory - \$500 - \$1,500 per structure -Evaluation to determine if arch/tribal site is significant - \$15K - \$40K per site depending on size, location and complexity - Evaluation to determine if historic buildings/structures are significant. -\$1K-\$2K per building depending on size, complexity and location -Conduct Tribal government to government consultation \$500 to \$2,000 per meeting (TDY costs) -Develop Programmatic Agreement -\$10K -Endangered Species Management (includes monitoring) \$20K-\$2M -Realignment NEPA (EA) \$100K -Install Best Management Practices to protect impaired waterways and reduce non-point source runoff from training areas and ranges -\$100K-\$3M</p> <p><u>Fort Detrick:</u> -Air Conformity Analysis - \$25K-\$75K -New Source Review Analysis and Permitting - \$100K-\$500K -Develop Programmatic Agreement (PA) - \$10K -Realignment NEPA at gaining base <1K pers -\$100K</p>	<p>Asbestos/Lead-based paint removal -\$200K-\$1M</p> <p>Access controls/caretaker management -\$500K-\$1M (annually)</p> <p>Land Use Controls management/enforcement in perpetuity \$50K-\$100K (annual)</p> <p>Environmental Baseline Survey- \$300K-\$500K</p>
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COBRA Costs:	<p><u>Fort Belvoir:</u> -Air Conformity Analysis -\$50K -Re-alignment NEPA at gaining base - \$400K -New Source Review -\$100K</p> <p><u>Fort Sam Houston:</u> -Realignment NEPA at gaining base -\$100K</p> <p><u>Aberdeen:</u> -Air Conformity Analysis - \$50K -New Source Review - \$100K -NEPA (EA) \$100K</p> <p><u>Fort Detrick:</u> -Air Conformity Analysis - \$50K -New Source Review - \$100K -Realignment NEPA <1K pers -\$100K</p>	EBS+ Disposal EIS -\$1.3M
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