

SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS
SCENARIO # 292

[TABS FINAL VERSION]
TITLE: USA-0121 CLOSE FT GILLEM

GENERAL DESCRIPTION: Close Ft Gillem. Relocate headquarters, 1st US Army to Rock Island, 2nd Recruiting Brigade to Redstone Arsenal, the 52nd EOD group to Ft. Campbell, the 81st RRC Equipment Concentration Site to Ft. Benning and closes the AAFES Atlanta Distribution Center. Several other small Army and DOD activities are also relocated to Base X and an enclave is included for the Georgia Army National Guard, the remainder of the 81st RRC units and the CID Forensics Laboratory.

Proposal affects the following Army installations:

1. Rock Island gains approximately 300 personnel and no MILCON.
2. Redstone Arsenal gains approximately 200 personnel and construction of approximately 63,000 SF MilCon.
3. Ft Campbell gains approximately 100 personnel and construction of approximately 13,000 SF MilCon
4. Ft Benning gains approximately 100 personnel 6,000 SF MILCON.
5. Ft Gillem closes.

Note - Environmental assessments for Pope AFB and Shaw AFB are provided separately by USAF, and are not included in this document.

ANALYST:

LAST UPDATED: 4/21/05

Env Resource Area	<i>#1 Gaining Installation Assessment</i> Inst Name: Rock Island Arsenal	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact. The receiving installation is in attainment for all NAAQS.	#213 - In attainment for all criteria pollutants #211 - no threshold exceedences reported #212 - no permit/thresholds exceeded. #218/ISR - no AQM impact to mission. #220 - Title V Major Operating Permit
Cultural/Archeological/ Tribal Resources	Likely no impact, however resources must be evaluated on a case-by-case basis thereby causing increased delays and costs.	#233 - 75% of installation surveyed #235 65 historic properties #231 - Native people sites identified #236 - No programmatic agreement ISR/230/201 - No impact to mission #230 - Archaeological resources identified, no restrictions reported #232 - Sites with high potential for archaeological resources identified #234 - N/A
Dredging	No impact	#226-228 - N/A
Land Use Constraint Sensitivity Resource Areas	No impact	#30 - >300 BA reported, approximately 10 required based on 1.5 small admin organizations #254 / 256 - no constraints reported CERL-high encroachment reported
Marine Mammals/ Marine Resources	No Impact	#248-250, 252, 253 - N/A
Noise	No impact	#239 - No noise contours off-installation

Threatened & Endangered Species/Critical Habitat	TES include Bald Eagle but has no impact on installation, causes no restrictions.	#259 - 1 TES identified (Bald Eagle) - no restrictions. #260-264 - None
Waste Management	No impact	#265 – No RCRA TSD Facility #269 - No RCRA Subpart X Permit #272 - No permitted solid waste disposal facility
Water Resources	No impact. Water quality 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 USEPA Water Quality Standards.	#293/ISR - no restrictions No water constraints. #297 – Installation uses publicly owned off-installation sewage treatment plant #276 – Not located over a sole-source aquifer #279 – Installation discharges to impaired waterway #275 – Groundwater contamination includes PCBs/oils, chromium, TCEA, Vinyl Chloride and Lead #281 – Surface water contamination includes TCE, Vinyl Chloride, PNAs and chromium #282 – On-installation publicly owned industrial wastewater plant IREM indicates infrastructure to support additional 12,030 personnel
Wetlands	No impact	#251 - wetlands survey completed 9/99 #259 - wetlands restrict 3.5% of installation

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);**SCENARIO # 292**

Env Resource Area	#2 Gaining Installation Assessment Inst Name: <u>Redstone</u>	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact.	#213 – In Attainment for all Criteria Pollutants. #211 –No permit or Major Source thresholds projected to be exceeded based on 1% increase at Redstone; ample permit buffers exist. #212- No exceedences reported for top 5 HAPs #220 – Has a Major Title V Permit (SIC code 9711) #218 – No restrictions reported ISR2 –AQM adversely impacting mission
Cultural/Archeological/Tribal Resources	346 archeological sites identified, some with restrictions on vehicle traffic. 426 historic properties. 19 Native American tribes have asserted an interest in archeological sites. Potential impact may occur as a result of increased time delays and negotiated restrictions. Also resources must be evaluated on a case-by-case basis, thereby causing increased delays and costs. Cultural / archeological / tribal resources currently restrict operations. Additional operations may impact these resources and result in further restrictions on training or operations.	#229 – Limitations to fee-simple ownership #230- 346 archeological resources identified, some restrictions reported #231- Sacred sites identified #232- Areas with high potential for archaeological resources identified #233- Installation is 96% surveyed #235 - 426 historic properties on 2800 acres. #234 – 19 Native American Tribes have asserted interest in installation’s archeological sites, currently in formal consultation #236 – No Programmatic Agreement however State MOA covers alteration renovation and or demolition of 398 buildings eligible for National Register
Dredging	No Impact	#226, 227, 228 – N/A
Land Use Constraints/Sensitive Resource Areas	No impact.	#30 -3,229 Buildable Acres available, 7 acres req'd (based on 1 Small Admin Org) #201, 254, 256 – No restrictions/coordination required. #256 – 2 Sensitive Resource Areas identified, coordination required but currently pose no restrictions CERL Study – moderate encroachment projected
Marine Mammals/Marine Res	No Impact	#248, 249, 250, 252, 253 – N/A

Noise	No impact.	#239 - 4339 Noise Zone 2 and 693 Zone 3 acres extends off-installation, which is moderately encroached by development.
Threatened & Endangered Species/Critical Habitat	<p>TES on installation include Prices potato bean (<i>Apios priceano</i>), Bald Eagle (<i>Haliaeetus leucocephalus</i>), Indiana Bat (<i>Myotis sodalis</i>), Gray Bat (<i>Myotis grisescens</i>), Alabama Cave Shrimp (<i>Palaemonias alabamae</i>) and American Alligator (<i>Alligator mississippiensis</i>).</p> <p>Federally listed species restrict <0.7% of land. Prices potato bean restricts 0.3% of land. Vehicle use is restricted to existing roads and utilities maintenance in this area and must be monitored by Environmental Office; the Alabama Cave Shrimp restricts 0.4% of land in the Area immediately surrounding Bobcat Cave; access is closed to vehicles.</p> <p>Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.</p>	<p>#259 – TES on installation include Prices potato bean (<i>Apios priceano</i>) (restricts .03% of land), Bald Eagle (<i>Haliaeetus leucocephalus</i>), Indiana Bat (<i>Myotis sodalis</i>), Gray Bat (<i>Myotis grisescens</i>), Alabama Cave Shrimp (<i>Palaemonias alabamae</i>) (restricts 0.4% of land) and American Alligator (<i>Alligator mississippiensis</i>).</p> <p>#260, 261, 262, 263 - No critical habitat, no development restrictions, no candidate species, no Biological Opinion.</p>
Waste Management	No Impact.	<p>#269 – Has RCRA Subpart X Permit.</p> <p>#265 – Has RCRA Permitted TSD facility</p> <p>#272 – Has permitted SWDF at 25% capacity</p>
Water Resources	No impact.	<p>#276 – Not in recharge zone of sole source aquifer</p> <p>#278 – Not subject to McCarren Amendmt</p> <p>#293 – No previous restrictions.</p> <p>IREM indicates installation can support 15,699 additional personnel</p> <p>#279 – Does not discharge into impaired waterway.</p> <p>#291 – 2 on-installation gov't owned plants</p> <p>#297 – 1 on site wastewater treatment plt</p> <p>#282 – No industrial wastewater trmt plant</p>
Wetlands	No impact.	<p>#257 – Jurisdictional wetlands restricts 25% of installation where a permit is required for dredge and fill operations.</p> <p>#251 – Wetlands survey completed 03/02</p>

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Env Resource Area	#3 Gaining Installation Assessment Inst Name: Ft. Campbell	Analyst Comments (& data source(s) that drive assessment)
Air Quality	<p>Impact Expected. Ft. Campbell is in marginal non-attainment for Ozone.</p> <p>Added operations will require New Source Review permitting, Air Conformity Analysis and modifications to existing Title V permit.</p>	<p>#213 – In marginal non-attainment for Ozone (8-hour)</p> <p>#211 –No permit or Major Source thresholds projected to be exceeded based on 1% increase at Ft Campbell.</p> <p>#220 – Holds 1 Major Operating Permit (SIC code 9700)</p> <p>#222 – No Emissions Credit Trading program available</p> <p>#218 – No restrictions to operations reported due to air quality requirements</p>
Cultural/Archeological/Tribal Resources	<p>1 archeological site and 2537 historic properties identified. 5 Native American tribes have asserted an interest in archeological sites and burial sites.</p> <p>Potential impact may occur as a result of increased time delays and negotiated restrictions.</p> <p>Cultural / archeological / tribal resources currently restrict operations. Additional operations may impact these resources and result in further restrictions on training or operations.</p>	<p>#230 – 1 archeological resources on installation; restrictions reported- State SHPO considers potentially eligible as a Historic District, requires consultation with SHPO prior to work.</p> <p>#231 – Native People sites identified</p> <p>#233- 90% surveyed</p> <p>#235 –2537 historic properties identified covering 2601 acres</p> <p>#229 –Limitations to fee-simple ownership reported</p> <p>#236 – Programmatic Agreement with SHPO</p> <p>#234 – 5 tribes assert interest in archeological sites and burial sites; in formal consultation</p> <p>#232 – Areas with high archaeological potential identified.</p>
Dredging	No impact	#226-228 –N/A.
Land Use Constraints/Sensitive Resource Areas	No impact	<p>#30 – 3825 buildable acres reported, approximately 4 acres needed (based on ½ small admin building).</p> <p>#201 – 2 restrictions reported-Surface area danger zone for training on stinger missiles/0001-2400 daily and Noise restrictions 0001-2400 daily</p> <p>#256 – 1 Sensitive Resource Area identified but cause no restrictions</p> <p>CERL Study – moderate encroachment projected</p>
Marine Mammals/Marine Resources/Marine Sanctuaries	No impact	#248, #249, #250, #252, #253 - No restrictions

Noise	Operations are currently restricted due to noise considerations. Additional noise-generating activities may be restricted. Further evaluation required	#239 – Installation has 16818 acres of Noise Zone 2, and 5605 acres of Noise Zone 3 that extend off the range, and 11765 acres of Noise Zone 2, and 2168 acres of Noise Zone 3 that extend off the installation. Installation is moderately encroached by development. #202 – Installation has published noise abatement procedures “Fort Campbell Installation Environmental Noise Management Plan, Cam Reg 95-1, FLIPS, JLUS, ICUS Pamphlet” #201 –Noise restrictions 0001-2400 daily
Threatened& Endangered Species/Critical Habitat	TES listed include Indiana Bat and Grey Bat, but no restrictions to operations are reported. Additional operations may impact threatened / endangered species possibly leading to restrictions on training or operations	#259 – TES listed include Indiana Bat and Grey Bat. No restrictions reported. #260 – No critical habitat identified #261 – No Biological Opinion #262 – No restrictions reported #263, #264 – No candidate species/habitat reported #201- No restrictions reported
Waste Management	No impact	#269 – No RCRA Subpart X permit. #265- No TSD facility -Withdrawal of the Part B application for the hazardous waste OBOD Unit at 101ST Airborne Division (Air Assault) AND Fort Campbell, Clarksville, TN (EPA ID. NUMBER: TN 5210020140, TDEC letter dated 28 June, 2002 TN Rule 1200-1-11-.05(07) 40 CFR 262.34(a) #272 –Has permitted solid waste disposal facility, 12.6% filled

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Water Resources</p>	<p>Installation is located over the recharge zone of a sole-source aquifer, which may result in future regulatory limitations on training activities.</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. Water quality issues currently restrict operations. Increases in personnel may further restrict operations and / or require implementation of enhanced mitigation measures.</p>	<p>#276 – Installation is located over a sole-source aquifer #278 – McCarren Amendment does not apply #293 – No Potable water restrictions #291 – Installation uses one On Military Installation Govt Privatized Plant for potable water IREM indicates remaining capacity for potable water to support 17,447 personnel #279 –Installation discharges to 3 impaired waterways, installation further contributes to impairment– all 3 are sources of potable water #297 – Installation uses 1 On Military Installation Privatized Plant for sewage treatment #282 – No Industrial Gov’t owned wastewater treatment system Final Stat Packages- Scenario increases current population by approximately 0.2% ISR2 – WQM issues adversely affect mission</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Wetlands</p>	<p>No impact</p>	<p>#251- Wetlands survey complete 02/02 #257 – Wetlands restrict 0.0006% of range and restrict operations on 0.01% of installation -If wetlands are destoried for a MCA project, mitigations will be required.</p>

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Env Resource Area	#4 <i>Gaining</i> Installation Assessment Inst Name: Ft Benning	Analyst Comments (& data source(s) that drive assessment)
Air Quality	<p>Impact Expected. Ft. Benning is projected to be in Non-Attainment for PM2.5. *</p> <p>Added operations will require Air Conformity Analysis.</p>	<p>#213, #219 - All NAAQS in Attainment currently, but projected to be Non-Attainment for PM2.5 (state of GA is contesting).</p> <p>#211 Emissions inventory shows permit limits exceeded for VOC, NOx, CO, PM, & Major source threshold limits exceeded for NOx and PM2.5. However, the State of Georgia exempts emissions from prescribed burning activities. 99.4% of CO, 68.2% of Nox, 94% of PM, 92% of all PM 10 and 60.3% of VOC are attributed to prescribed burning activities. Therefore the emissions reported to the State are under permitted thresholds.</p> <p>#220 Has Major Source permit</p>
Cultural/Archeological/Tribal Resources	<p>1226 archeological sites identified, with restrictions on vehicle traffic and digging. 1617 historic properties. 12 Native American tribes have asserted an interest in archeological sites.</p> <p>No impact expected, due to no new construction or training load from this recommendation.</p>	<p>#230-1226 arch sites listed, with restrictions on vehicle traffic and digging within designated sites</p> <p>#231-Native People Sites Identified</p> <p>#232 –Areas with high potential for archaeological resources identified</p> <p>#233 - 90% surveyed</p> <p>#234 – 12 tribes asserted interest in burial/sacred sites; in formal consultation</p> <p>#235 - 1617 historic properties listed</p> <p>#236-No Programmatic Agreement</p> <p>ISR2 shows access to sites is impacting mission.</p>
Dr ed g- ing	No impact.	#226-228 –No restr
Land Use Constraints/Sensitive Resource Areas	No impact.	<p>#30 - Buildable Acres – approximately 2 req'd; (based on ¼ small admin facility) >2500 non-training acres available.</p> <p>#256 – 1 Sensitive Resource Area identified but causes no restrictions</p> <p>CERL Study – moderate encroachment projected</p>
Mar ine Ma mm als/ Mar is	No impact.	#248, #249, #250, #252, #253 - No restrictions
Noise	No impact. No noise generated by this recommendation.	#201, #239 - 9003 acres of Noise Zone 2, and 1785 acres of Zone 3 extend outside installation boundary. IENMP imposes ban on firing .50 Cal or larger from 1100-0600 hours

Threatened & Endangered Species/Critical Habitat	<p>5 TES listed (Bald Eagle, Wood Stork, American Alligator, Relict Trillium, and Red-Cockaded Woodpecker), with restrictions to 0.1% of the installation. Bald Eagle restrictions affect airspace for flight operations 1,000 vertical feet and 1,000 horizontal feet from nest site. Ground training is restricted to no training within 1,500 feet of nest sites. These restrictions are implemented during the nesting period (Dec-May). Relict Trillium area restricted to foot traffic only and no digging allowed. Red-Cockaded Woodpecker restricts vehicle use, maneuver and bivouac, weapons firing, pyrotechnics use, and digging within 200 feet of individual red-cockaded woodpecker cavity trees.</p> <p>No impact expected, due to no new construction or training load from this recommendation.</p>	<p>#201, 259, 261 - 5 TES listed (Bald Eagle, Wood Stork, American Alligator, Relict Trillium, and Red-Cockaded Woodpecker), with restrictions to 0.1% of the installation. Bald Eagle restrictions affect airspace for flight operations 1,000 vertical feet and 1,000 horizontal feet from nest site. Ground training is restricted to no training within 1,500 feet of nest sites. These restrictions are implemented during the nesting period (Dec-May). Relict Trillium area restricted to foot traffic only and no digging allowed. Red-Cockaded Woodpecker restricts vehicle use, maneuver and bivouac, weapons firing, pyrotechnics use, and digging within 200 feet of individual red-cockaded woodpecker cavity trees.</p> <p>#260 - No critical habitat #262 - BO restrictions impede expansion #263 - 1 candidate species (Georgia Rockcross) affects 0.005% of range.</p>
Waste Management	No Impact.	#269 No RCRA Subpart X Permit - but none needed.
Water Resources	<p>No impact.</p> <p>Water quality impaired by pollutant loadings. Current operations may contribute to impaired water quality. Significant mitigation measures may be required to reduce impacts to water quality and achieve US EPA water quality standards.</p>	<p>#276- Not over a recharge zone #278, 293 - No previous restrictions #279 - installation discharges to 7 impaired waterways, but is not currently a polluter of impaired waterways, #291 – Has 5 potable water production plants on-installation #297 – Installation uses 2 On Military Installation plants for sewage treatment IREM shows water infr can support 17,009 more people ISR2 indicates WQM and WWQM issues adversely impact the mission.</p>
Wetlands	No impacts.	<p>#251 - Wetlands survey completed 1995 #257 – Wetlands restrict 9% of range</p>

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SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);**SCENARIO # 292**

Env Resource Area	<i>Losing Installation Assessment</i> Inst Name: Ft Gillem	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact.	#213 In Non-Attainment for Ozone and PM.
Cultural/Archaeological/Tribal Resources	Surveys and consultation with the SHPO will be required to ensure protection of cultural resources and determine disposition of historical resources.	#230-,232,234 - No Arch/cult/Native peoples sites identified - no restr #233 - 42% surveyed #235 50 Historic Properties listed #236 - Has Programmatic Agreement
Drinking	No impact	
Land Use Constraints/Sensitive Resource Areas	Special waste management areas at the installation include IRP sites and operational ranges. Restoration, monitoring/sweeps, access controls, and/or deed restrictions may be required after closure to prevent disturbance, health and safety risks, and/or long-term release of toxins to environmental media.	#240 - \$18M CTC with \$27.1M spent thru FY03. DERP-ARC 2003 - 11 operational ranges (473 acres), \$8.8M-\$21.4M #273 - No MMRAs
Marine Mammals/Marine	No impact	
Noise	No impact	
Threatened & Endangered Species	No impact.	#259-264 - No TES/habitat/cand species
Waste Management	No impact.	#265 No RCRA TSD facility on site #269 No RCRA Subpart X Permit #272 No permitted solid waste disposal facility
Water Resources	Environmental media issues at the installation include Chlorinated solvents, PAHs, metals and pesticides in groundwater, and tetrachloroethane in surface water. Restoration and monitoring of contaminated sites will likely be required after closure to prevent significant long-term impacts to the environment.	#275 -Groundwater contaminated with Chlorinated solvents, PAHs, metals, and pesticides (from landfill). #281 - Surfacewater contaminated with tetrachloroethane (from landfill). #297/#822- Has domestic wastewater treatment plant (5 plants, off installation)
Wetlands	No impact	

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);

SCENARIO #292

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Rock Island, Redstone, Ft Campbell Ft Benning,	Losing Installation Inst Name: Ft Gillem
Environmental Restoration*	None	#240 - DERA IRP sites - \$18M CTC -DERP-ARC 2003 - 11 operational ranges (473 acres), \$8.8M-\$21.4M
Waste Management	None	None
Environmental Compliance	<p>Rock Island -Realignment NEPA at gaining base \$100K (EA) -Endangered Species Management (includes monitoring) - \$20K-\$2M -Install Best Management Practices to protect impaired waterways and reduce non-point source runoff from training areas and ranges - \$100K-\$3M</p> <p>Redstone: -Conduct Tribal govt to govt consultation - \$2000 per meeting. -Develop PA -\$10K -Endangered Species Management (includes monitoring) - \$20K-\$2M. -ESA Consultation (BA Prep) \$10K-\$100K -Realignment NEPA at gaining installation - \$100K (EA) (less than 1K pop increase)</p> <p>Ft Benning: -Air Conformity Analysis - \$25K-\$75K * -Re-alignment NEPA at gaining base - <1K personnel - \$100K (EA) -Install Best Mgt Practices to protect impaired waterways and reduce non-point source runoff from training areas and ranges - \$100K - \$3M.</p> <p>Ft. Campbell: -Air Conformity Analysis - \$25K-\$75K -New Source Review & Permitting -\$100K-\$500K -Conduct Tribal govt to govt consultation - \$2000 per meeting. -Noise analysis and monitoring - \$5K-\$75K. -Endangered Species Management (includes monitoring) - \$20K-\$2M -ESA Consultation (BA Prep) \$10K-\$100K -Realignment NEPA at gaining installation - \$100K (EA) (less than 1K pop increase)</p>	<p>Environmental Baseline Survey (EBS) \$300K-500K.</p> <p>Access controls / caretaker management of historical/arch/cultural sites \$500K - 1M (annually).</p> <p>Asbestos / lead paint removal - \$200K - \$1M.</p> <p>Land Use controls management / enforcement in perpetuity - \$50K - \$100K per year.</p>

COBRA Costs:	<u>Rock Island:</u> -Realignment NEPA at gaining base -\$100K (EA) <u>Redstone:</u> -Re-alignment NEPA (EA) - \$100K (EA) <u>Ft. Campbell:</u> -Air Conformity Analysis - \$50K -New Source Review - \$100K -Noise analysis and monitoring - \$20K -Re-alignment NEPA (EA) - \$100K (EA) <u>Ft Benning:</u> Air Conformity Analysis - \$50K* NEPA (EA) - \$100K. <u>Pope AFB:</u> Reference Air Force SSEI "USA0121" FY06 NEPA cost: \$48K <u>Shaw AFB:</u> Reference Air Force SSEI "USA0121" FY06 NEPA cost: \$48K	Installation contains no candidate species and no archaeological resources - \$550K (EBS + disposal EA)
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* Fort Benning's "non-attainment" status was removed by the EPA in April 2005. However, per agreed-upon data analysis process, the Army relied on FY2003 data when conducting it's analysis and therefore, "non-attainment" status and associated costs (e.g., non-conformity analysis) are reflected above.