DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
INSTALLATIONS AND ENVIRONMENT
110 ARMY PENTAGON
WASHINGTON DC 20310-0110

9 May 2005

SAIE-IA

MEMORANDUM FOR RECORD

SUBJECT: Army Criteria 8 Summaries of Cumulative Environmental Impacts (Final Summaries)

1. Enclosed in this archive are the Army's final Summaries of Cumulative Environmental Impacts (SCEIs) reflecting the cumulative impacts when multiple recommendations impacted the same base.

2. These SCEIs are prepared to assess if the collective effect of all recommendations at receiving installations is environmentally supportable. These SCEIs are not being incorporated in the Army's 2005 BRAC report, but are to be maintained as supporting documentation.

3. Installations affected by two or more recommendations, as long as one causes an increase in personnel or construction will receive as SCEI. Installations with only one affecting recommendation need no SCEI, as the single Summary of Scenario Environmental Impacts (SSEI) fully describes the cumulative impacts. Installations with only losing actions affecting, no matter how many actions, receive no SCEI, as the cumulative impacts are positive and need not be examined in detail.

3. POC for this action is COL Thomas R. Crabtree at (703) 696-99788, or Mr Karl Markeset, (703) 696-9765.

Thomas R. Crabtree

THOMAS R. CRABTREE
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Encl
SCEIs

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SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #1 **TITLE: SCEI FOR ABERDEEN PROVING GROUND**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

E&T-0064v3	**CSS Center Fort Lee**	**Loss**
HSA-0031v2	**Consolidate CPOs**	**Gain**
HSA-0065v2	**ATEC Consol**	**Gain**
HSA-0092Rv2	**Relocate Army Headquarters and Field Operating Agencies**	**Loss**
HSA-0133v2	**Joint Mob Sites**	**Gain**
MED-0002Rv2	**National Capital Region**	**Gain**
MED-0028Rv2	**Create Joint Centers of Excellence for Chem, Bio and Med RDA**	**Gain**
MED-0057Rv2	**Brooks City Base, TX**	**Gain**
S&S-0035Rv2	**ICP to DLA**	**Gain**
Tech-009Rv2	**Def Research Svc Labs Consol Army**	**Gain**
USA-0223Rv5	**Fort Monmouth, NJ**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Aberdeen Proving Ground	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact Expected. APG is currently in Non-Attainment area for Ozone. Addition of operations may exceed major source thresholds for NOx and VOCs. A New Source Review and Air Conformity Analysis is required and an modification to existing Title V permit.	#213, 219 – In Severe non-attainment for Ozone (EPA web site confirms non-attainment for Ozone 8-hour) #211- No permit limits reported; Major Source threshold for VOC and NOx is projected to be exceeded. #220 – Holds 2 Major Operating Permits (SIC code 9711) #222 – Emissions Credit Trading program available for NOx and VOCs #218 – No restrictions to operations reported due to air quality requirements
Cultural/Archeological/Tribal Resources	78 Historic properties, 5 archeological resources identified to date and areas with high archeological potential, but no restrictions to mission reported. 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, since resource must be evaluated on a case-by-case basis, thereby causing increased delays and costs Potential impacts may occur as result of increased times delays and negotiated restrictions, due to tribal government interest.	#230, 232 – 5 archaeological resources listed; no restrictions reported; high potential #231 – Native People sites identified #233- 2% of installation has been surveyed for cultural resources #234 – 5 tribes have assert interest in burial/sacred sites; in contact, but no formal consultation yet. #235 – 78 Historic properties identified #236 – No Programmatic Agreement

Dredging	No Impact. If the new unit/activity requires dredging, then UXO and endangered species surveys may be required.	#226 – If the new unit/activity requires dredging, then UXO and endangered species surveys may be required. #227 – If new unit/activity requires dredging, then dredging may not be able to occur in the short term due to known dredging impediments. #228 - N/A
Land Use Constraints/Sensitive Resource Areas	No Impact. Four SRAs identified but cause no restrictions.	#30 – 2,863 buildable acres reported; Approximately 238 acres required (based on 5.5 times the size of a Large Admin Org) #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. #256 – 4 Sensitive Resource Areas identified but cause no restrictions CERL Encroachment Study – Moderate Encroachment Projected
Marine Mammals/Marine Resources/ Marine Sanctuaries	No impact.	#248, #250, #252, #253 - No restrictions #249 – TES listed include Shortnosed Sturgeon (*Accipenser brevorostrum)* (restricting Poole's Island Shoal waters around island) and Bald Eagle (*Haliaeetus leucocephalus*), (restricting Poole's Island areas near nest sites, APG Shoreline & Areas near nest sites- affecting 17.2 acres of installation)
Noise	No impact. No significant noise expected to be generated by incoming missions.	#239 – 235,848 acres of Noise Zone 2 extend outside installation, which is not highly encroached by development. #202 – Installation has published noise abatement procedures for main installation and training range but not for auxiliary airfield.

Threatened& Endangered Species/Critical Habitat	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. TES already restrict operations. Additional operations may further impact threatened/endangered species leading to additional restrictions on training or operations.	#249, #259 – TES listed include Shortnosed Sturgeon (*Accipenser brevorostrum)* and Bald Eagle (*Haliaeetus leucocephalus*). The Bald Eagle has delayed operations due to protection of buffers around nests during nesting season on approximately 7.9% of installation. #260 – No critical habitat identified #261 – Biological Opinion for Bald Eagle restricts range operations #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. Sturgeon: APG has a BA and BO from NOAA containing no limitations. APG is to coordinate with them if specific projects pose a risk. #263, #264 – No candidate species/habitat reported #201/ISR2 - TES have restricted msn/opns by limiting night flying times.
Waste Management	No impact.	#269 – Interim RCRA Subpart X OB/OD Permit, Permit has been submitted #265- Installation has permitted hazardous waste RCRA Treatment Storage and Disposal (TSD) facility. #272 – No a permitted solid waste disposal facility ISR2 - HW Mgt issues adversely impact mission

Water Resources	Minimal impact expected. 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.	#276 – Installation not located over a sole-source aquifer #278 – McCarren Amendment does not apply #279 –Installation discharges to impaired waterway; nutrient discharges from installation further impair waterway but is not a source of potable water. #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%) #291 – 1 Gov't owned on-installation, and 1 public water treatment plant #297 – 2 Sewage treatment plants on site; 1 gov't owned, 1 privatized. #282 – Industrial Gov't owned ww treatment plant located on installation. #822, 824, 825, 826, ISR2 – no restrictions reported IREM indicates capacity for potable water to support 33,500 additional personnel
Wetlands	No impact.	#251- Survey completed 04/92. #257 – Wetlands affect 0.3% of installation but do not restrict operations. ISR2 - wetlands adversely impact mission

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED)

SCEI #1

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Aberdeen Proving Ground
Environmental Restoration*	None.
Waste Management	None.
Environmental Compliance	-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 - Evaluation to determine if historic buildings/structures are significant. -Conduct Tribal government to government consultation $500 to $2,000 per meeting (TDY costs) -Develop Programmatic Agreement -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 -Realignment NEPA (EIS) -$1M (based on cumulative nature of administrative realignments, construction of facilities and moving >5000 personnel to Aberdeen Proving Ground
COBRA Costs:	Air Conformity Analysis - $50K New Source Review - $100K NEPA (EIS) $1M

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #2 **TITLE: SCEI ON ANNISTON ARMY DEPOT**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

DON-0165Rv4	**MCLB Barstow**	**Gain**
IND-0083Av2	**Realign Rock Island Arsenal**	**Gain**
IND-0083Bv2	**Realign Seal Beach**	**Gain**
S&S-0043Rv2	**Privitize Tires, POL & Gases**	**Loss**
S&S-0051R	**4 regional Strategic Distribution Platforms**	**Loss**
USA-0036R	**Red River Army Depot, TX**	**Gain**

ANALYST: _____ **DATE: UPDATED 5/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Anniston AD	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact expected. Scenario will likely require a Prevention of Significant Deterioration (PSD) permit to operate a rubber plant (USA-0036) – Cost captured under Air Conformity Analysis.	#213 – N/A answer = in attainment for all criteria pollutants #211 – No exceedences reported #220 – Holds 1 Major Operating Permit (SIC code 3497, 3471, 9711) and 2 Natural Minor Operating permits (SIC codes 9711, 3497) #222 – No Emissions Credit Trading program available #218 – No restrictions to operations reported due to air quality requirements
Cultural/Archeological/ Tribal Resources	No impact	#233- 100% of installation has been surveyed for cultural resources #235 – No Historic prop identified #230 – 0 arch resources reported on installation #231 – Native People sites identified #236 – Programmatic Agreement with SHPO #234 – N/A #232 – No areas with high archaeological potential identified.
Dredging	No impact	#226, #227, #228 – N/A
Land Use Constraints/ Sensitive Resource Areas	No impact	#30 – 1,445 BA available - 0 acres required. Existing facilities can likely absorb proposed activities. #201 – No constraints reported #256 – No Sensitive Resource Areas identified CERL Study – Moderate Encroachment
Marine Mammals/ Marine Resources / Marine Sanctuaries	No impact	#248, #249, #250, #252, #253 - No restrictions

Noise	No impact.	#239 – N/A = installation does not have noise contours that extend off installation.
Threatened& Endangered Species/Critical Habitat	TES on installation include Tennessee Yellow-eyed Grass. Threatened/endangered/candidate species or critical habitats exist but do not impact operations. Additional operations may impact TES, possibly leading to restrictions on operations.	#259 – TES listed include Tennessee Yellow-eyed Grass (*Xyris tennessensis*) on installation, no restrictions reported. #260 – No critical habitat identified #261 – No Biological Opinion reported #262 – No development restrictions reported. #263, #264 – No candidate species/habitat reported
Waste Management	Likely 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	Installation located over a sole-source aquifer – consider need for additional mitigation measures/pollution prevention with increased depot maintenance activities to protect aquifer. May required upgrades to industrial wastewater treatment plant due to increased depot maintenance activities and rubber plant.	#276 – Installation located over a sole-source aquifer #278 – McCarren Amend does not apply #293 – N/A answer = assume no potable water restrictions #291 – Installation uses one publicly owned off-installation plant for potable water. IREM indicates remaining capacity for potable water to support 27,184 pers (1238 added); Final Stat Packages- Scenario increases population by 34% #279 –Installation does not discharge to impaired waterway #297 – One on-military installation gov't owned plant – reports maximum peak daily outflow more than maximum design capacity #282 – Industrial Gov't owned wastewater treatment system located on installation. #822, 824, 825, 826, ISRII – no restrictions reported
Wetlands	No impact	#251- Survey completed 11/95. #257 – Wetlands affect 0.7% of installation but do not restrict operations.

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);

SCEI #2

IMPACTS OF COSTS

Env Resource Area	Gaining Installations Inst Name: Anniston AD
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	Anniston: - PSD/Air Conformity Analysis -$25K-$75K -Realignment NEPA at gaining base - industrial-$1M (EIS) -Endangered Species Management (includes monitoring) $20K-$2M -ESA Consultation (BA Prep) -$10K-$100K
COBRA Costs:	Anniston -Air Conformity Analysis -$50K -New Source Review - $100K -Realignment NEPA-$1M (EIS)

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #3 **TITLE: SCEI ON FORT BELVOIR**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

E&T-0029v4	Prime Power	Loss
HSA-0047Rv2	MDA/USA MSL to Redstone Arsenal	Gain
HSA-0053Rv2	OSD 4th Est to Fort Belvoir and NNMC	Gain
HSA-0069v2	Close Misc Army Leases NCR	Gain
HSA-0071v3	Media & Pubs to Ft. Fort Meade	Loss
HSA-0092Rv2	Relocate Army Headquarters and Field Operating Agencies	Loss
HSA-0108Rv2	MILDEP CIS to Quantico	Loss
INT-0004R	Consolidate NGA Activities	Gain
MED-0002Rv2	National Capital Region	Gain
MED-0028Rv2	Create Joint Centers of Excellence for Chem, Bio and Med RDA	Loss
S&S-0035Rv2	ICP to DLA	Gain
TECH-0018a	Realign Wpns/Armaments Research	Loss
TECH-0040Rv2	Co-locate Extramural Research Program Managers to Bethesda	Loss
USA-0223Rv5	Fort Monmouth, NJ	Gain

ANALYST: _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Belvoir	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact Expected. Ft Belvoir is currently in Non-Attainment area for Ozone and PM 2.5. Added operations will require New Source Review permitting and Air Conformity Analysis.	#213 –Moderate Non-Attainment for Ozone (1-hour), proposed/projected for Non-Attainment for Ozone (8-hour) and PM2.5. #211 - Permit thresholds projected to be exceeded for VOCs (based on 85% incr in emissions at Belvoir) #220 – Has a Major Title V Permit and (Natural) Minor Operating Permit. #218/ISR – No mission impact/No restr.
Cultural/Archeological/Tribal Resources	12 historical/prehistoric archeological resources reported, with restrictions to future construction. 62 historic properties listed. Potential impact may occur since resources must be evaluated on a case-by-case basis, thereby causing increased delays and costs.	#230- 12 historic/prehistoric (and 193 potentially eligible) sites that restrict future construction in certain areas. #231- No Native peoples sites; #232 - No high potential sites #233 - 100% surveyed #234 – No tribes interested in resources. #235 - 58 historic properties on 212 acres, 1 district and 4 resources outside of district. #236 – No Programmatic Agreement. ISR2 - No impact to mission
Dredg-ing	No Impact.	#227 - If new activity requires dredging, then dredging may not be able to occur in the short term due to known dredging impediments #226, 228 - N/A

Land Use Constraints/Sensitive Resource Areas	No Impact.	#30 - Buildable Acres - Approximately 1000 acres req'd, (25 times the size of a Large Admin Org.) 2,355 acres available. #201, 254– No restrictions/coordination required. #256 – One Sensitive Resource Area that restricts airspace. CERL Study – high encroachment projected
Marine Mammals/ Mari	No Impact.	#248-253 - No restr
Noise	No Impact.	#239 - No noise contours off-installation.
Threatened& Endangered Species/Critical Habitat	Federally listed species includes Bald Eagle (*Haliaeetus leucocephalus*). Restrictions for TES include aircraft height restriction over nest during nesting season, and no land-disturbing training or timber clear cutting along undeveloped/undisturbed shorelines. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or 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; none required.
Water Resources	No Impact.	#276,278,293 – No water restrictions reported #279 - Doesn't discharge to impaired waterway. #824/825 indicates adequate water avail IREM – potable water infr. can support 19,000 more people. #291 –1 off-installation public water production plant #297 – 1 off-installation public ww plant #282 – No industrial wastewater trmt plant
Wetlands	No impact. Land outside of wetlands is available for construction.	#251 – Installation was surveyed in 1997 #257 – 10.2% of installation has wetlands that restrict operations, permits needed if planning to disturb wetlands.

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);
SCEI #3

IMPACTS OF COSTS

Env Resource Area	Gaining Installation **Inst Name: Fort Belvoir**
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-Air Conformity Analysis $25K-$75K -New Source Review -$100K-$500K -Develop Programmatic Agreement -$10K -Endangered Species Management (includes monitoring) - $20K-$2M -Realignment NEPA at gaining base $1M (EIS - based on moving > 4000 personnel)
COBRA Costs:	Air Conformity Analysis $50K New Source Review $100K NEPA (EIS) - $1M

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) **[TABS FINAL]**

SCEI #4 **TITLE: SCEI ON FORT BENNING**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

USA-0046Rv2	**Single Drill SGT School**	**Loss**
USA-0121R	**Fort Gillem, GA**	**Gain**
USA-0143v3	**RC Transformation in Georgia (AFRC FT Benning, GA)**	**Gain**
USA-0243R	**Maneuver Training**	**Loss**

ANALYST: _____ **LAST UPDATE: 5/06/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Benning	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact Expected. Ft. Benning is projected to be in Non-Attainment for PM2.5. Added operations will require New Source Review permitting and Air Conformity Analysis.	#213, #219 - All NAAQS in Attainment currently, but projected to be Non-Att for PM2.5 (state of GA is contesting). #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. #220 Has Major Source permit
Cultural/Archeological/Tribal Resources	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. Due to interest from tribes, a potential impact may occur as a result of increased time delays and negotiated restrictions. Since there is no Programmatic Agreement in place, resources must be evaluated on a case-by-case basis, thereby causing increased delays and costs. Cultural / archeological / tribal resources currently restrict operations. Cultural/archeological/tribal resources currently restrict operations. Additional operations may impact these resources and result in further restrictions on training or operations.	#230, 231, 232 - 1226 arch sites listed, with restrictions on vehicle traffic and digging within designated sites. #233 - 90% surveyed #234 - 12 tribes asserted interest in burial/sacred sites; in formal consultation #235 -1617 historic properties listed #236- No Programmatic Agreement ISR2 shows access to sites is impacting mission.
Dr ed g- ing	No impact.	#226-228 –No restr

Land Use Constraints/Sensitive Resource Areas	No impact.	#30 - Buildable Acres – approximately 800 req'd (based on slightly larger SF than 1 large school) >2500 non-training acres available. #256 – 1 Sensitive Resource Area identified but causes no restrictions CERL Study – moderate encroachment projected
Marine Mammals/ Marine	No impact.	#248, #249, #250, #252, #253 - No restrictions
Noise	9003 acres of Noise Zone 2 and 1785 acres of Noise Zone 3 extends outside installation boundary, which is moderately encroached by development. Increased noise may result in operational restrictions on the installation. Further evaluation required.	#201, #239 - 9003 acres of Noise Zone 2, and 1785 acres of Zone 3 extends outside installation boundary. IENMP imposes ban on firing .50 Cal or larger from 1100-0600 hours
Threatened& Endangered Species/Critical Habitat	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. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.	#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. #260 - No critical habitat #262 - BO restrictions impede expansion #263 - 1 candidate species (Georgia Rockcress) affects 0.005% of range.
Waste Management	No Impact.	#269 No RCRA Subpart X Permit - but none needed.

Water Resources	Installation currently discharges to an impaired waterway, and increased population and training activity may add to pollutant load. 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.	#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 infrastructure can support 17,009 more people ISR2 indicates WQM and WWQM issues adversely impact the mission.
Wetlands	No impacts.	#251 - Wetlands survey completed 1995 #257 – Wetlands restrict 9% of range

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED)
SCEI #4

IMPACTS OF COSTS

Env Resource Area	Gaining Installations Inst Name: Fort Benning
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-Air Conformity Analysis - $25K-$75K -New Source Review & Permitting -$100K-$500K -Conduct Tribal govt to govt consultation - $50 - $2K per meeting -Develop PA -$10K - Evaluation to determine if archeological/tribal site(s) are significant $15K-$40K per site. -Mitigation of archeological site by data recovery iaw PA - $25K-$500K per site depending on complexity - Evaluation to determine if historic buildings/structures are significant - $1000-$2000 per building depending on size and location. - Mitigation of historic buildings/structures by HABS/HAER recordation iaw PA - $25K-$500K per site depending on complexity - Noise Analysis and Monitoring - $5K - $75K -Re-alignment NEPA at gaining base – multiple bde-sized realignment - $1.0M (EIS) -Endangered Species Management (includes monitoring) - $20K-$2M -ESA Consultation (BA Prep) $10K-$100K -Install Best Mgt Practices to protect impaired waterways and reduce non-point source runoff from training areas and ranges - $100K - $3M.
COBRA Costs:	Air Conformity Analysis - $50K. New Source Review Analysis and permitting - $100K. Noise Analysis and Monitoring- $20K NEPA (EIS) - $1M.

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #5 **TITLE: SCEI FOR FT BLISS**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

E&T-0061v3	**Net Fires Center (Fort Sill)**	**Loss**
HSA-0133v2	**Joint Mob Sites**	**Gain**
USA-0221v4	**Operational Army (IGPBS)**	**Gain**
USA-0225v3	**RC Transformation in TX**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Bliss	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact Expected. Currently in serious Non-Attainment for O3, and marginal NonAttainment for PM, & CO. Added operations may exceed major source thresholds for several pollutants. A New Source Review and Air Conformity analysis will be required.	#213 – Non-attainment for O3, PM10, & CO. #211 -major source threshold projected to be exceeded for VOC (based on 1/2 Ft Hood emissions – Ft Hood has similar units) #220 -no permits. #218/ISR - No mission impact indicated.
Cultural/Archeological/ Tribal Resources	11K acres include cultural resources, but no restrictions to training, operations, or construction reported. 407 historic properties listed. 2 Native American tribes assert an interest in archeological sites. Tribal negotiations may be required to expand use near listed areas. Potential impacts may occur since resources must be evaluated on a case-by-case basis, thereby causing increased delays and costs.	#230,232 - 11.2K acres affected, but no restrictions to tng/opns reported; #231 - No Native peoples sites; #233, 40% surveyed; #235- 408 historic props; #236 - No prog agreement; #234 - 2 tribes in formal consultation. ISR2 - no adverse impact to mission.
Dr ed g- ing	No Impact	#226-228 – No restrictions
Land Use Constraints/Sen sitive Resource Areas	No impact.	#30 – >10,000 buildable acres available without using housing /training land, 1070 acres req'd (based on approx size of 5 heavy bdes). #201, 254, 256 - no restr. CERL Study – minimal encroachment projected
Mar ine Ma mm als/ Mar ine	No Impact	#248-253 – No restrictions
Noise	Operations are not currently restricted due to noise considerations, however adding 4+ bde-sized units represents greater than 50% increase in noise generating operations, and may result in significant impacts and further restrictions. Further evaluation required.	#239 - No noise contours off-installation. CERL - minimal encroachment, so noise impact may be mitigated.

Threatened& Endangered Species/Critical Habitat	Federally listed species include Sneeds Pincushion Cactus and Bald Eagle, but these impact less than 1% of training land. Threatened / Endangered species exist but do not currently impact operations. Additional operations may impact TES possibly leading to restrictions on operations.	#259 lists Sneeds Pincushion Cactus, Bald Eagle, but impacts <1% of training land. #260-262,264 - No habitat restricitons #263 - 1 candidate species, impacts <1% land; ISR2 shows no impact.
Waste M	No impact.	#269 Has RCRA Subpart X Permit
Water Resources	Significant impact due to increased water demand from increase in approx 20,000 duty population (>50K total population increase including family members). Will require upgrade of water and wastewater infrastructure and will likely require purchase of potable water resources.	#276,278,293 - No previous restrictions #824/825 indicates adequate water avail IREM - water infr can support 12.5K more people before upgrade needed. Approx 20K duty personnel are added (proposal doubles current installation population). #279 - Doesn't discharge to imp waterwy. #282 - No industrial ww plant #291 – Has 1 potable water production plant on-installation #297,822 – 4 dom ww treatment plants on installation and 1 off-installation (public owned) plant.
Wetlands	No impact.	#251, 257 - No jurisdictional wetlands.

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);

SCEI #5

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Ft Bliss
Environmental Restoration*	None.
Waste Management	None.
Environmental Compliance	Ft. Bliss: Re-alignment NEPA (EIS) - $1M. Air Conformity Analysis - $25K-$75K New Source Review - $100K-$500K Develop Programmatic Agreement (PA) -$10K Mitigation of archeological site by data recovery iaw PA - $25K-$500K per site depending on complexity Mitigation of historic buildings/structures by HABS/HAER recordation iaw PA - $25K-$500K per site depending on complexity Evaluation to determine if archeological/tribal site(s) are significant $15K-$40K per site. Evaluation to determine if historic buildings/structures are significant - $1000-$2000 per building depending on size and location. -Conduct Tribal govt to govt consultations - $2K-$10K per meeting. ESA Consultation (BA Prep) $10K-$100K Endangered Species Management (includes monitoring) $20K-$2M -Noise analysis and monitoring -$5K-$75K
COBRA Costs:	Ft. Bliss: Air Conformity Analysis - $50K New Source Review - $100K NEPA (EIS) - $1M. Noise analysis -$20K

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI# 34 **TITLE: SCEI ON BLUE GRASS ARMY DEPOT**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

IND-0113v2_2	**Realign Sierra Army Depot**	**Gain**
USA-0036R	**Red River Army Depot, TX**	**Gain**
USA-0237v2	**RC Transformation in KY**	**Gain**

ANALYST: _____ **LAST UPDATE: 05/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Blue Grass Army Depot	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact.	#211 - No permit/Major Source threshold exceedances reported #212-No exceedances reported #213 In Attainment for all Pollutants #220 Natural Minor Operating Permit #218/ISR No mission impacts
Cultural/Archeological/Tribal Resources	A very limited portion of this installation has been surveyed for cultural resources (< 5%); therefore, the extent of cultural resources on the installation and impacts to these resources is uncertain". Impact unlikely since BGAD has already identified 10 acres for facility, but area may have to be surveyed before construction.	ISR – Cannot dig or disturb site #230 Archeological sites present, 3 burial sites (Indian Mounds) #231 Burial/Sacred sites identified #232-areas w/high potential for archaeological resources identified #233 33% of installation surveyed # 235 1 historic district identified, with one resource in the district #236 No programmatic agreement #234 – Native tribes have not asserted interest and contact is very rare.
Dredging	No Impacts	No dredging impacts for this scenario.
Land Use Constraints/Sensitive Resource Areas	No Impacts. Restrictions present on activities and therefore ability to accept new missions due to TES present. 23 acres have been identified for new AFRC, but TES impact may have to be considered.	#30 - 499 buildable acres available, 23 acres required #201 – N/A #254 – N/A #256- SRA is Central Kentucky Wildlife Management Area, but not posing any restrictions to installation CERL-Moderate encroachment
Marine Mammals/Marine Resources/ Marine	No Impacts	There are no impacts to marine resources from this proposal.
Noise	No Impacts.	#239 - No noise contours extending offsite.

Threatened& Endangered Species/Critical Habitat	No impact expected. TES include Running Buffalo Clover but impacts <1% of installation where must avoid area where plant grows. 5 Candidate species include Rafinsque's big eared bat, eastern wood rat, loggerhead shrike, Henslow's sparrow, A crayfish. TES/candidate species/critical habitats already restrict operations. Additional operations may further impact threatened/endangered/candidate species or critical habitat lead to additional restrictions on operations	#249 No restrictions #259 lists Running Buffalo Clover TES but impacts <1% of installation, so must avoid area where plant grows. #260 ,#261 Biological opinion present, restrictions reported #262 Development restrictions reported #263 5 Candidate species identified (Rafinsque's big eared bat, eastern wood rat, loggerhead shrike, Henslow's sparrow, A crayfish) #264 no critical habitat for candidate species (reported N/A)
Waste Management	No impact.	#269 RCRA subpart X permit that accepts off-site waste. #265- No permitted TSD facility on-site #272-No permitted SWDF
Water Resources	No impact.	#276 Not over a recharge zone #278 Not subject to McCarren IREM - water infrastructure has sufficient surplus of potable water to support additional 458 people, scenario adds 0 #279 Does not discharge into impaired waterway. #282 No industrial waste water treatment plant #293 No restrictions on water use ISR - No impact to mission, SIRRA reports amber rating (4) for water quality #291- One On Military Installation Govt Owned Plant for potable water #297- One On Military Installation Govt Owned Plant for sewage treatment
Wetlands	No Impact	#257 – <1% wetlands present at installation with very limited restrictions

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED);
SCEI# 34

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Blue Grass AD
Environmental Restoration*	None.
Waste Management	None.
Environmental Compliance	Blue Grass: -Realignment NEPA at gaining base –$100K (EA) (due to storage mission only is moving to McAlester) -Archeological/tribal resources inventory = $25 to $100 per acre depending on location and ground cover -Evaluation to determine if historic buildings/structures are significant $1,000 - $2,000 per building depending on size, complexity and location -Evaluation to determine if archaeological/tribal site(s) is significant - $15,000 - $40,000 per site depending on size, complexity and location -Endangered Species Management (includes monitoring) - $20K-$2M
COBRA Costs:	Realignment NEPA (EA)-$100K

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI# 6 **TITLE: SCEI ON FT BRAGG**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

HSA-0133v2	**Joint Mob Sites**	**Gain**
USA-0040v4	**Fort Bragg, NC**	**Loss**
USAF-0122v3	**Realign Pope**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Bragg	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No Impact. Ft Bragg is in Attainment for all criteria pollutants.	#213 – In attainment for all criteria pollutants #211 -No permit or major source thresholds reported - additional scenario emissions unknown. #220 -Major Operating permit. #218/ISR - No mission impact indicated.
Cultural/Archeological/Tribal Resources	3016 cult/arch resources reported, 56 which restrict training requiring no disturbance of these sites. 362 historic properties listed. 8 Native American tribes assert an interest in archeological sites. A potential impact may occur as a result of increased time delays and negotiated restrictions. Cultural / archeological / tribal resources currently restrict operations. Additional operations may impact these resources and result in further restrictions on training or operations.	#230,232 - 3016 cult/arch resources reported, 56 with restrictions to training (no disturbance of site) #231 - No Native peoples/sacred sites #233, 63% surveyed; #235- 362 historic props; #236 - Has programmatic agreement; #234 - 8 tribes in contact / no formal consultation. ISR2 - no adverse impact to mission.
Dr ed g- ing	No impact.	#226-228 –No restr
Land Use Constraints/ Sensitive Resource Areas	No impact.	Buildable Acres – 187 acres required; with >2870 acres available without using housing /training land. #201, 254, 256 - no restr. CERL - moderate encroachment projected
Mar ine Ma mm als/ Mar ine	No impact.	#248, #249, #250, #252, #253 - No restrictions
Noise	482 acres of Noise Zone 2 extend outside installation boundary, which is moderately encroached by development. Increased noise may result in operational restrictions on the installation. Further evaluation required.	#239 - 482 Noise Zone 2 acres extend off-installation.

Threatened& Endangered Species/Critical Habitat	24 Federally listed species exist, 17 with training restrictions affecting the range areas. Together they restrict <4% of installation acreage. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.	#259 lists 24 different Federally listed species, 17 with training restrictions that affect the range areas (but together this restricts <4% of total installation acreage) #261- Has biological opinion covering 5 species #260,263,264 - No critical habitat or candidate species #262 - BO restrictions impede development
Waste Management	No impact.	#269 No RCRA Subpart X Permit; none required.
Water Resources	Ft Bragg experienced water controls and restrictions in 2002. Increased water demand may lead to further controls and restrictions.	#276,278 - Not over recharge zone; Not subject to McCarren Amend #293 - 180 days of 2002 experienced water controls/ restrictions - post conservation policy #824/825 indicates adequate water avail IREM - water infr can support 264 more people before upgrade needed, with 1802 permanent duty personnel added. #279 - Doesn't discharge to imp waterway. #822 - Dom ww treatment plant
Wetlands	No impact.	#251 - No survey date #257 - 7.6% of the installation and 7.4% of the range is restricted due to jurisdictional wetlands.

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED)

SCEI #6

IMPACTS OF COSTS

Env Resource Area	Gaining Installation **Inst Name: Ft Bragg**
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	- Re-alignment NEPA - Environmental Assessment (EA) at gaining base - $400K (based on >1000 pers moving to Ft Bragg) -Conduct Tribal govt to govt consultation - $50 - $2K per meeting - Evaluation to determine if archeological/tribal site(s) are significant $15K-$40K per site. -Mitigation of archeological site by data recovery iaw PA - $25K-$500K per site depending on complexity - Evaluation to determine if historic buildings/structures are significant - $1000-$2000 per building depending on size and location. - Mitigation of historic buildings/structures by HABS/HAER recordation iaw PA - $25K-$500K per site depending on complexity -Noise Analysis and Monitoring - $5K - $75K -Endangered Species Management (includes monitoring) - $20K-$2M -ESA Consultation (BA Prep) $10K-$100K
COBRA Costs:	NEPA (EA) - $400K Noise Analysis - $20K *

*Eglin AFB
Ref: Air Force SSEI "USA0040", COBRA costs are as follows:
FY07 Hazardous Waste Program $100K
FY06 NEPA cost: $400K
FY07 Air Permit Revision: $50K

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI# 37 **TITLE: SCEI ON FT BUCHANAN**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

HSA-0092Rv2	**Relocate Army Headquarters and Field Operating Agencies**	**Loss**
USA-0234v2	**RC Transformation in PR**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Fort Buchanan	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impacts. Installation is in Attainment for all Criteria Pollutants.	#213 In Attainment for all Pollutants #211- No permit or Major Source thresholds projected to be exceeded based on increased population. #220 Major Operating Permit #218/ISR No mission impacts indicated
Cultural/Archeological/Tribal Resources	One Archeological site and 302 historic properties listed, with no restrictions on operations and/or training. Potential impact may occur since resources must be evaluated on a case-by-case basis, thereby causing increased delays and costs.	#229 No cemeteries limiting ownership #230, 232 - 1 Arch site listed, with no restrictions; high potential for others #231, 234 - No Native Peoples sites, no interest asserted. #233 - 100% surveyed #235 - 302 historic properties #236 No programmatic agreement for historic properties ISR – No adverse impact to mission/construction/operations
Dredging	No Impacts	#226-228 N/A
Land Use Constraints/Sensitive Resource Areas	Sensitive Resource Areas on or near the installation restrict operations on approximately 20% of the installation.	#30- Buildable Acres – Less than 10 req'd and 42 available (administrative bldgs.) #256- 8 Sensitive Resource areas exist, which restrict operations on approx 20% of the installation. CERL Study – high encroachment projected
Marine Mammals/Marine Resources/ Marine	No Impacts	#248-250, 252-253 - No restrictions
Noise	No Impacts.	#239 No noise contours extend offsite ISR & SIRRA – No impacts on mission

Threatened& Endangered Species/Critical Habitat	Installation has Federally listed species (Lebisa, Ruddy Duck, Rosewood, and Puerto Rico Boa), that restrict operations on approximately 17% of installation land. Restrictions restrict expansion and construction in these areas. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.	#259 4 TES species identified: (Lebisa, Ruddy Duck, Rosewood, and Puerto Rico Boa), with restrictions on expansion & construction to 17% of installation. #260 Critical habitat identified #261,262 Biological opinions restrict operations/expansion/construction #263, 264 Candidate species and candidate habitat identified (same species as #259)
Waste Management	No impacts.	#269 No Subpart X permit.
Water Resources	The installation is located over or in the recharge zone of a sole-source aquifer, which may result in future regulatory limitations on training activities.	#276 Located over a recharge zone #278, 293 - No water restrictions #279 Does not discharge into impaired waterway #291 –1 off-installation public owned water production plant #297 – 1 off-installation dom ww treatment plts #282 - No ind ww treatment IREM indicates water infrastructure has capacity to accommodate 5,126 additional personnel. ISR - No impact to mission
Wetlands	No Impacts.	#251 - surveyed 12/1999 #257 - 2.75% of installation contains wetlands and operations are restricted

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED)
SCEI# 37

IMPACT OF COSTS

Env Resource Area	Gaining Installation **Inst Name: Fort Buchanan**
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-NEPA Environmental Assessment = $100,000 (required due to environmental complexity) - Develop PA -$10K - Endangered Species Management (includes monitoring) $20K-$2M
COBRA Costs:	Realignment NEPA (EA) = $100,000

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI# 35 **TITLE: SCEI ON FT CAMPBELL**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

USA-0121R	**Fort Gillem, GA**	**Gain**
USA-0221v4	**Operational Army (IGPBS)**	**Loss**
USA-0238v2	**RC Transformation in TN**	**Gain**

ANALYST: _____ **LAST UPDATE:** **5/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft. Campbell	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact Expected. Ft. Campbell is in marginal non-attainment for Ozone. Added operations will require New Source Review permitting, Air Conformity Analysis and modifications to existing Title V permit.	#213 – In marginal non-attainment for Ozone (8-hour) #211 –No permit or Major Source thresholds projected to be exceeded based on 1% increase at Ft Campbell. #220 – Holds 1 Major Operating Permit (SIC code 9700) #222 – No Emissions Credit Trading program available #218 – No restrictions to operations reported due to air quality requirements
Cultural/Archeological/Tribal Resources	1 archeological site and 2537 historic properties identified. 5 Native American tribes have asserted an interest in archeological sites and burial sites. Potential impact may occur as a result of increased time delays and negotiated restrictions. Cultural / archeological / tribal resources currently restrict operations. Additional operations may impact these resources and result in further restrictions on training or operations.	#230 – 1 archeological resources on installation; restrictions reported- State SHPO considers potentially eligible as a Historic District, requires consultation with SHPO prior to work. #231 – Native People sites identified #233- 90% surveyed #235 –2537 historic properties identified covering 2601 acres #229 –Limitations to fee-simple ownership reported #236 – Programmatic Agreement with SHPO #234 – 5 tribes assert interest in archeological sites and burial sites; in formal consultation #232 – Areas with high archaeological potential identified.
Dre dg-ing	No impact	#226-228 –N/A.

Land Use Constraints/Sensitive Resource Areas	No impact	#30 – 3825 buildable acres reported, approximately 9 acres needed (based on 20% of a large admin building) #201 – 2 restrictions reported-Surface area danger zone for training on stinger missiles/0001-2400 daily and Noise restrictions 0001-2400 daily #256 – 1 Sensitive Resource Area identified but cause no restrictions CERL Study – moderate encroachment projected
Marine Mammals/Marine Resources/	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

Water Resources	Installation is located over the recharge zone of a sole-source aquifer, which may result in future regulatory limitations on training activities. 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.	#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
Wetlands	No impact	#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.

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED)

SCEI #35

IMPACTS OF COSTS

Env Resource Area	Gaining Installation **Inst Name: Ft Campbell**
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-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)
COBRA Costs:	-Air Conformity Analysis - $50K -New Source Review - $100K -Noise analysis and monitoring - $20K -Re-alignment NEPA (EA) - $100K (EA)

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #31 **TITLE: SCEI ON FORT CARSON**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

USA-0224Rv3	**Fort Hood, TX**	**Gain**
MED-0054R	**Convert Inpatient Services to Clinics**	**Gain**

ANALYST: _____ **DATE: UPDATED 5/06/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Carson	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact expected. The receiving installation is in Maintenance for CO, and in Attainment for all other NAAQS. Addition of operations at the receiving installation will require New Source Review permitting and modifications to existing Title V permit. A more detailed emission analysis will be required to determine regulatory impact. Air quality issues currently restrict operations, and additional operations with air emissions may also be restricted.	#213 - Maintenance for CO #211 - No permit limits reported, Major Source thresholds currently exceeded for VOC, NOx, CO, and PM10. #220 - Major & Synthetic Minor operating permits. #218 - Colorado Air Quality Control Commission regulation restricts certain types of smoke/obscurant training ISR2 - AQM adversely impacts mission.
Cultural/Archeological/Tribal Resources	669 arch/cultural resources listed, with restrictions to mechanized vehicle traffic affecting less than 1% of Pinon Canyon. 40 historic properties listed. 13 Native tribes assert an interest in archeological sites. A potential impact may occur as a result of increased time delays and negotiated restrictions due interest from Native American tribes. Additional operations may impact cultural, archeological, or historic resources, which may lead to further restrictions.	#230, 231,232 - 669 cult/arch/Native People's sites, but no restrictions at Ft Carson reported (<1% of Pinon Canyon is restricted from mech vehicle traffic) #233, 57% surveyed; #234 - 13 tribes assert interest in sacred sites; #235- 40 historic props; #236 - Has programmatic agreement; ISR2 - no adverse impact to mission.
Dredg-ing	No Impact.	#226, 227, 228 – N/A
Land Use Constraints/Sensitive Resource Areas	No Impact	Buildable Acres - 1247 buildable acres available; 214 req'd (based on 1 Hvy Bde), #201, 254, #256- no restr. CERL Study – moderate encroachment projected
Marine Mammals/Marine Bios	No Impact.	#248, 249, 250, 252, 253 – N/A
Noise	15,686 acres of Noise Zone 2 and 2322 acres of Zone 3 extend off-installation, which is moderately encroached by development. Further evaluation required.	#239 - 15,686 acres of Noise Zone 2 and 2322 acres of Zone 3 extend off-installation.

Threatened& Endangered Species/Critical Habitat	Installation has Federally listed species (Bald Eagle, Greenback Cutthroat Trout, & Mexican Spotted Owl), that restricts operations on <1% of installation land. Spotted Owl affects off-road vehicle use and bivouacs within 200-meters of known winter roost trees, in effect from 15 November-28 February, and includes 38 trees for a total of 1,178-acres. The Greenback Cutthroat Trout affects approx 15-acres with no training zone. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.	#259, 261 lists Bald Eagle,, Cutthroat Trout, Spotted Owl with restrictions to <1% of land. #261,262,264 - No habitat #263 - Candidate species include Arkansas Darter & Black-tailed prairie dog - no restr ISR2 shows no impact.
Waste Management	No Impact	#269 Has RCRA Subpart X Permit
Water Resources	Potential Impact. Special restrictions or procedures are in place to significantly limit the production of or distribution of potable water to the installation. Increased missions at the installation may result in additional restrictions or mitigation requirements (e.g., purchase/development of additional water resources). Water infrastructure may require upgrade. Water quality is impaired by pollutant loadings, and 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.	#276 - Not over recharge zone #278 - McCarren amendment applies #293 - No historical restrictions #824, 825 - adequate water available IREM - infr can support 1159 more people #279 - Discharges to 2 impaired waterways (but does not impair them). #822 - Dom & Ind ww treatment plant #291 - Has 1 off-installation public owned water production plant #297-1 On Military Installation Govt Owned Plant for sewage treatment #282 1 On Military Installation Govt Owned Plant for industrial wastewater
Wetlands	No Impact	#251 - surveyed 11/92 #257 - 1.6% wetlands, with restrictions (to tracked vehicles in wetlands).

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);

SCEI #31

IMPACTS OF COSTS

Env Resource Area	Gaining Installations Inst Name: Fort Carson
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-Re-alignment NEPA at gaining base-(EIS) - $1M -New Source Review permitting -$100K-$500K -Evaluation to determine if archeological/tribal site(s) are significant $15K-$40K per site. -Evaluation to determine if historic buildings/structures are significant - $1K-$2K per building depending on size and location. -Conduct Tribal govt to govt consultation - $2K-$10K per meeting. -Mitigation of archeological site by data recovery IAW PA - $25K-$500K per site depending on complexity -Mitigation of historic buildings/structures by HABS/HAER recordation IAW PA - $25K-$500K per site depending on complexity -Noise analysis and monitoring -$5K-$75K -Install Best Mgt Practices to protect impaired waterways and reduce non-point source runoff from training areas and ranges - $100K - $3M. -Endangered Species Planning level survey -$20K-$100K/2-6 months -Endangered Species Management (includes monitoring) $20K-$2M
COBRA Costs:	NEPA (EIS) - $1M New Source Review -$100K Noise analysis -$20K

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI# 33 **TITLE: SCEI ON CRANE ARMY AMMUNITION ACTIVITY**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

IND-0106v2	**Close Kansas Army Ammunition Plant**	**Gain**
IND-0113v2_2	**Realign Sierra Army Depot**	**Gain**
IND-0122v2_2	**Close Lone Star Army Ammunition Plant**	**Gain**

ANALYST: _____ **LAST UPDATE: 05/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Crane AAA___	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact expected. CO, NOX, PM10 threshold exceedances likely due to additional operations. Addition of operations at the receiving installation will require New Source Review Permitting. A more detailed emission analysis will be required to determine regulatory impact of new activities. This function also requires permits for a lead treatment plant.	#213 – Installation is in attainment area for all criteria pollutants. #211 - Major Source thresholds exceedences reported for NOX, PM10 and CO #212-Exceedences for Manganese reported #220 -Major operating permit #218/ISR2 - No mission impact indicated.
Cultural/Archeological/Tribal Resources	63 archeological sites identified, with restrictions on future construction and training / operations. 66 historic properties identified. 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. Cultural/archeological/tribal resources currently restrict operations. Additional operations may impact these resources which may lead to increased delays and costs.	#201 No constraints #229, 231 No cemeteries/native people's sites #232 – High potential for archeological sites #230 63 archeological resources that do not restrict current construction but constricts future construction and training/operations reported #233 – 2.34% of installation surveyed #234 – No tribes have asserted interest; #235- 3 historic districts with 66 total resources #236 - Programmatic Agreement in place. ISR2 - No adverse impact to mission.
Dred g-ing	No Impact	No dredging impacts for this scenario.
Land Use Constraints/Sensitive Resource Areas	No Impact	#30 - 5,429 buildable acres available 15 acres required (based on 1 40,000 SF facility- twice the size of a small admin org) #254, #256 No SRA restricting training/mission CERL Study – Minimal encroachment
Marine Mammals/Marine Resources/ Marine	No Impact	There are no impacts to marine resources from this proposal.

Noise	Due to nature of additional operations and associated testing further evaluation is required.	#239 – 4,650 acres of Noise Zone 2 that extends outside the installation boundaries, which is minimally encroached by development.
Threatened& Endangered Species/Critical Habitat	Installation has two Federally Listed species (Indiana Bat and Bald Eagle) which affect 80 acres of land by preventing the destruction of trees within a 600 feet radius from nesting site during certain times. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.	#249 No restrictions #259 2 Federal TES species (Indiana Bat, Bald Eagle) on site, affects 80 acres (no destruction of trees 600 feet radius distance from nesting site during certain times) #260 No critical habitat #261 No biological opionion #262 No restrictions #263, 264 No candidate species, no proposed habitat
Waste Manag ement	No Impact – permit modifications may be required for lead processing	Q#269 – Has RCRA Part X Permit
Water Resources	Impaired waterway may be further impacted by additional operations. Significant mitigation measures to limit releases may be required to reduce impacts to water quality and achieve USEPA Water Quality Standards. Installation may need upgrades to industrial wastewater treatment to handle additional lead wastes.	#276 Installation not over a recharge zone #278 Not subject to McCarren Act #279 Installation does discharge into impaired waterway (E.coli)– which is source of drinking water #293 No potable water restrictions #282 Installation uses 13 On Military Installation Govt Owned Plants for industrial wastewater treatment #291 Installation uses one On Military Installation Govt Owned Plant for potable water production IREM indicates infrastructure can support additional 1,020 personnel- scenario adds none.
Wetl ands	No Impacts.	#251 - Installation surveyed on 6/98 #257 - 5% of the installation has restricted wetlands (no dredging)

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED);
SCEI# 33

IMPACTS OF COSTS

Env Resource Area	Gaining Installations Inst Name: Crane AAA
Environmental Restoration*	None
Waste Management	None
Environmental Compliance (CONT'D)	Crane: Air Conformity Analysis - $25K-$75K New Source Review Analysis - $100K-$500K. Archeological/tribal resources inventory - $25 - -Endangered Species Management (includes monitoring)-$20K-$2M -Install Best Mgt Practices to protect impaired waterways and reduce non-point source runoff from training areas and ranges - $100K - $3M.
COBRA Costs:	Crane: -New Source Review - $100K -Air Conformity Analysis -$50K -NEPA $1M (EIS)

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #7 **TITLE: SCEI FOR FORT DETRICK**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

MED-0002Rv2	**National Capital Region**	**Gain**
MED-0028Rv2	**Create Joint Centers of Excellence for Chem, Bio and Med RDA**	**Gain**
USA-0178v3	**RC Transformation in Maryland (AFRC Frederick, MD)**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	*#4 Gaining* 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 thresholds exceedance problems for NOx. A New Source Review and Air Conformity analysis will be required	#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 prog. agreement ISR2 - No adverse impact to mission.
Dre dg- ing	No Impacts	Dredging is not part of proposal and there are no impediments to dredging.
Land Use Constrai nts/Sensi tive Resourc e Areas	No impacts	Buildable Acres - approx 10 acres req'd with 81 acres available. #201, 254, 256 - no restr. CERL - minimal encroachment
M ar in e M a	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
Water Resources	No Impacts.	#276,278 – No restrictions #293 – Water use restrictions have been reported (2002) #824/825 indicates adequate water avail IREM – potable water infr. 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
Wetlands	No Impacts.	#257 – 1.1% of installation has restricted wetlands – must also consider lead runoff from ranges into wetlands. Cannot expand installation.

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);

SCEI #7

IMPACTS OF COSTS

Env Resource Area	Gaining Installation **Inst Name: Fort Detrick**
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-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
COBRA Costs:	-Air Conformity Analysis - $50K -New Source Review - $100K -Realignment NEPA <1K pers -$100K

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #8 **TITLE: SCEI FOR DETROIT ARSENAL**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

S&S-0035Rv2	**ICP to DLA**	**Gain**
S&S-0043Rv2	**Privitize Tires, POL & Gases**	**Loss**
TECH-0013	**Jt. Ctr for Land Veh RDAT&E**	**Gain**
TECH-0031	**Realign Detroit Arsenal**	**Loss**
USA-0063v3	**U.S. Army Garrison Michigan (Selfridge)**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Detroit Arsenal	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact. Installation is in Attainment area for all Criteria Pollutants.	#213 – In attainment for all criteria pollutants #211 – No permit or major source thresholds projected to be exceeded, based on a 3% increase in emissions at Detroit Arsenal. #220 – Holds 2 Synthetic Minor Operating Permits (SIC code 8733- Permit # 566-96A & 146-02) #222 – Emissions Credit Trading program available for NO2, VOCs, PM10, PM2.5 Pb, SO2, CO #218 – No restrictions to operations reported due to air quality requirements
Cultural/Archeological/Tribal Resources	18 historic prop identified. No impact expected due to no construction required.	#233- N/A answer = No survey done #235 – 18 historic prop identified #230 –No arch resources reported #231 – N/A #236 – No Programmatic Agreement in place #234 – N/A #232 – N/A
Dredging	No impact	#226, #227, #228 – N/A
Land Use Constraints/ Sensitive Resource Areas	No impact.	#30 – 21.2 BA available – approximately 9 required, based on 1 medium supply an storage facility (approximately 160,000 SF) #201 - No constraints listed #256 – No Sensitive Resource Areas identified
Marine Mammals/ Marine Resources / Marine Sanctuaries	No impact	#248, #249, #250, #252, #253 – N/A

Noise	No impact	#239 – N/A
Threatened& Endangered Species/Critical Habitat	No impact	#259 – No TES listed (N/A) #260 – No critical habitat identified (N/A) #261 – No Biological Opinion (answered N/A) #262 – No restrictions reported #263, #264 – No candidate species/habitat reported
Waste Management	No impact.	#269 –No RCRA Subpart X OB/OD Permit #265- No RCRA TSD facility. #272 – Not a permitted solid waste disposal facility
Water Resources	No impact.	#276 – Installation is not located over a sole-source aquifer (N/A) #278 – McCarren Amend does not apply #293 – No potable water restrictions reported #291 – Installation uses 1 Off Military Installation Publicly Owned plant for potable water. IREM indicates remaining capacity for potable water to support 295,850 addl personnel #279 –Installation discharges to impaired waterway; unknown if installation contributes to status of waterway #297 – 1 Off Military Installation Publicly Owned Plant for Sewage Treatment #282 – No Industrial wastewater treatment system reported #822, 824, 825, 826 – no restrictions reported ISRII - No impact to mission.
Wetlands	No impact.	#251- N/A #257 – N/A

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED);
SCEI #8

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Detroit Arsenal
Environmental Restoration*	None.
Waste Management	None.
Environmental Compliance	-Realignment NEPA EA at gaining base - $100K (Based on moving <1000 population)
COBRA Costs:	Realignment NEPA EA at gaining base - $100K

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI # 9 **TITLE: SCEI FOR FORT DIX**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

DON-0057	**Close Inspector - Instructor West Trenton, NJ**	**Gain**
DON-0084AR	**Close NAS JRB Willow Grove, PA**	**Gain**
HSA-0010Rv2	**Establish Joint Bases**	**Loss**
HSA-0133v2	**Joint Mob Sites**	**Gain**
USA-0167v3	**USAR C2 NORTHEAST**	**Gain**

ANALYST: _____ **LAST UPDATE: 05/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Dix	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact Expected. Ft. Dix is in severe non-attainment for Ozone. Added operations will require New Source Review permitting and Air Conformity Analysis.	#213 – In severe non-attainment for Ozone (1-hour) and Ozone (8-hour) #211 – No permit or major source thresholds projected to be exceeded (based on 8% increase at Ft Dix) #220 – Holds 1 Major Operating Permit (SIC code 9711) #222 – Emissions Credit Trading program available for CO, SO2, NOx and VOCs #218 – No restrictions to operations reported due to air quality requirements
Cultural/Archeological/Tribal Resources	81 archeological resources and 1 historic property reported. One Native American tribe has asserted interest. Potential impact may occur since resources must be evaluated on a case-by-case basis, thereby causing increased delays and costs.	#230 – 81 archeological resources known on installation; no restrictions reported #231 – No Native People sites identified #233- 70% surveyed #235 – No "Historic Districts" have been designated on Fort Dix. Hanover Furnace is listed on the NJ State Register (15 June 1973) & the National Register (1 March 1974). On the Burlington County Register as Site #74001155. #229 – No known limitations to fee-simple ownership #236 – No Programmatic Agreement with SHPO #201 – No restrictions reported #234 – 1 tribe has asserted interest in burial/sacred sites; rare contact #232 – Areas with high archaeological potential identified.
Dre dg-ing	No impact	#227 –N/A. #226 – N/A

Land Use Constraints/Sensitive Resource Areas	No impact	#30 – 554 buildable acres available, 43 required (based on approx size of 1 large Admin Organization) #201 – No constraints reported #256 – 1 Sensitive Resource Area identified but cause no restrictions CERL Study – moderate encroachment projected
Marine Mammals/Marine Resources/ Marine Sanctuar	No impact	#248, #249, #250, #252, #253 - No restrictions
Noise	No impact – no noise expected from proposal.	#239 – Installation has 969.5 acres of Noise Zone 2, and 170.8 acres of Noise Zone 3 that extend off the range, and 603.7 acres of Noise Zone 2, and 76.4 acres of Noise Zone 3 that extend off the installation. Installation is moderately encroached by development. #202 – Installation has published noise abatement procedures for main installation, training range and auxiliary airfield
Threatened& Endangered Species/Critical Habitat	Federally listed species includes the Bald Eagle (*Haliaeetus leucocephalus*). TES exist, but do not impact operations. Additional operations may impact TES possibly leading to restrictions on operations.	#259 – TES listed include Bald Eagle (*Haliaeetus leucocephalus*). 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. OB/OD is in delay of closure; Training and emergency use only permitted. #265- Installation has a Fort Dix RCRA Part "B" Permit; Storage only. #272 – Not a permitted solid waste disposal facility

Water Resources	Installation is located over the recharge zone of a sole-source aquifer, which may result in future regulatory limitations on training activities.	#276 – Installation is located over a sole-source aquifer #278 – McCarren Amendment does not apply #293 – No Potable water restrictions #291 – Installation uses 2 Gov't owned on-installation plants for potable water. IREM indicates remaining capacity for potable water to support 17,095 personnel #279 –Installation does not discharge to impaired waterway #297 – Installation uses 1 On Military Installation Govt Owned Plant for sewage treatment #282 – No Industrial Gov't owned wastewater treatment system #822, 824, 825, 826, ISRII – reports restrictions for 365 days in FY99 due to infrastructure
Wetlands	No impact. Wetlands affect 32% of range and 13% of installation and restrict tactical vehicle operations. Additional operations may impact wetlands, which may lead to operations that are restricted.	#251- Answered N/A #257 – Wetlands affect 32% of range and 13% of installation and restrict tactical vehicle operations. Jurisdictional wetlands surveys have not been completed for most of the installation. The wetland information entered in the chart below is based on New Jersey Dept. Env. Protection identified wetlands.

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED);
SCEI # 9

IMPACTS OF COSTS

Env Resource Area	Gaining Installation **Inst Name: Ft Dix**
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-Air Conformity Analysis - $25K-$75K -New Source Review & Permitting -$100K-$500K -Endangered Species Management (includes monitoring) - $20K-$2M -ESA Consultation (BA Prep) $10K-$100K -Develop PA -$10K -Install Best Mgt Practices to protect impaired waterways and reduce non-point source runoff from training areas and ranges - $100K - $3M. -Survey for jurisdictional wetlands $300K-$5M -Evaluation of jurisdictional wetlands surveys $75K - $850K -Re-alignment NEPA at gaining base - <1K pers/admin realignment - $100K (EA)
COBRA Costs:	-Air Conformity Analysis - $50K -New Source Review - $100K -Re-alignment NEPA (EA) - $100K (EA)

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI# 10 **TITLE: SCEI ON FORT EUSTIS**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

E&T-0062v3	**Aviation Log to Fort Rucker**	**Loss**
E&T-0064v3	**CSS Center Fort Lee**	**Loss**
HSA-0010Rv2	**Establish Joint Bases**	**Loss**
HSA-0114Rv4	**TRANSCOM Components to Scott**	**Loss**
HSA-0133v2	**Joint Mob Sites**	**Loss**
MED-0054R	**Convert Inpatient Services to Clinics**	**Loss**
USA-0113R	**Fort Monroe, VA**	**Gain**
USA-0222R	**Fort McPherson, GA**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Eustis	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact Expected. The receiving installation is in Non-attainment area for Ozone. Added operations will require New Source Review permitting and Air Conformity Analysis.	#213 – Non-attainment for O3(8 hr) #211 - No permit/Major Source thresholds projected to be exceeded (based on 1% increase of emissions at Ft Eustis). #220 - Synthetic Minor operating permit. #218/ISR2 - No mission impact indicated.
Cultural/Archeological/Tribal Resources	139 arch/cultural resources, but no restrictions to tng/operations/constr. 60 historic properties listed. Potential impact may occur since resources must be evaluated on a case-by-case basis, thereby causing increased delays and costs.	#230, 231,232 - 139 arch resources, but no restrictions to tng/opns reported; #233, 90% surveyed; #234 - No tribes assert interest; #235- 60 historic props; #236 - No programmatic agreement; ISR2 - no adverse impact to mission.
Dredging	No Impact	#228 - Reports dredging maintenance reqt, and spoil site has 25 years remaining. No impacts to dredging expected w/ proposal.
Land Use Constraints/Sensitive Resource Areas	No Impact	#30 - Buildable Acres – approx 500 acres available, approximately 40 required (based on slightly less than 1 large admin organization) #201, 254- no restr. #256 - 8 SRAs, no restr CERL Study – moderate encroachment projected
Marine Mammals/Marine	No Impact	#248, #249, #250, #252, #253 - No restrictions
Noise	No Impact	#239 - No noise contours off-installation.

Threatened& Endangered Species/Critical Habitat	Installation has Federally listed species (Bald Eagle), that restricts operations on <4% of installation land. Restrictions include 3.24 mile buffers around nest habitat and associated (aircraft) flight restrictions. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.	#259 TES listed Bald Eagle, restr 3.1% of total installation land. #260-264 - No habitat/candidate species, no BO. ISR2 shows no impact.
Waste Management	No Impact	#269 No RCRA Subpart X Permit, none needed
Water Resources	Installation currently discharges to an impaired waterway, and increased population and training activity may add to pollutant load. Mitigation measures to limit releases may be required to reduce impacts to water quality and achieve US EPA water quality standards.	#276,278 No restr; #293 - 40 days restr in 2003 IREM - infr can support 92K more people #279 - Discharges to 2 imp waterwys (does not impair them). #291 –2 off-installation public owned production plants #297 – 2 off-installation dom ww treatment plts #282 – 2 off-installation industrial ww treatment plts ISR2 - No adverse impact to mission
Wetlands	No Impact	#251 - No survey date reported #257 - 25% wetlands, with permits req'd for constr, dredging, training.

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED);
SCEI# 10

IMPACTS OF COSTS

Env Resource Area	Gaining Installation **Inst Name: Ft Eustis**
Environmental Restoration*	None.
Waste Management	None.
Environmental Compliance	-Air Conformity Analysis - $25K-$75K -New Source Review - $100K-$500K -Develop PA -$10K -Install Best Mgt Practices to protect impaired waterways and reduce non-point source runoff from training areas and ranges - $100K - $3M. -Endangered Species Management (includes monitoring) $20K-$2M -NEPA (EA) - $400K (based on moving >1000 personnel)
COBRA Costs:	Air Conformity Analysis - $50K New Source Review - $100K NEPA (EA) - $400K

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) **[TABS FINAL]**

SCEI #11 **TITLE: SCEI FOR FORT HUACHUCA**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

HSA-0031v2	**Consolidate CPOs**	**Gain**
HSA-0133v2	**Joint Mob Sites**	**Loss**
S&S-0035Rv2	**ICP to DLA**	**Loss**
USA-0247v2	**Transform Reserve Component in Arizona**	**Loss**

ANALYST: _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Huachuca	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact. Ft Huachuca is in attainment for all NAAQS.	#213 All NAAQS in attainment. #211- No permit or Major Source thresholds projected to be exceeded #220 - Synthetic & Natural Minor Op permits #218/ISR2 - No mission impact
Cultural/Archeological/Tribal Resources	328 Arch resources reported, with some restrictions to vehicular traffic in range areas. 68 historic resources reported. 11 Native American tribes assert an interest in archeological sites. No impact expected due to no construction required with this recommendation.	#230, 232 - 328 Arch sites reported, which impose restrictions to off-road vehicle traffic; high potential reported #231 - Native People's sites reported #233 - 66% of installation surveyed #234 - 11 Native tribes assert interest in arch sites; in formal consultation #235 - 68 historic resources reported #236 - Has programmatic agreement. ISR2- Arch resource issues adversely impact the mission
Dredg-ing	No Impact	#226-228 – No restrictions
Land Use Constraints/ Sensitive Resource Areas	No Impact.	#30 - Buildable Acres - 645 available (645 excludes Tng,Hsg BA) - none required #256 - 4 SRAs, restr on ordnance & flight opns on ranges. CERL Encroachment Study – Moderate Encroachment Projected
Marine Mammals/ Marine Rece	No Impact	#248-250, 252-253 – No restrictions
Noise	No impact. No noise expected from this recommendation.	#239 - No noise zone acres extend outside installation. ISR2 - Noise Mgt issues adversely impact the mission.

Threatened& Endangered Species/Critical Habitat	Management of 5 Federally listed species cause restrictions to water use, off-road vehicle travel; pyrotechnic use; nighttime UAV operations and some live fire and field exercises from July 1 - November 15. No impact expected due to no construction or training load required with this recommendation.	#259, 261- 5 TES (Southwestern willow flycatcher, Sonora tiger salamander, Mexican Spotted Owl, Lesser long-nosed bat, Huachuca water umbel) with some restrictions to 10-20% of tng area. BO imposes restrictions affect off-road vehicle travel; pyrotechnic use; nighttime UAV operations and some live fire and field exercises from July 1 - November 15. The willow flycatcher and water umbel impose water use restrictions. #260 - Critical habitat exists for the Mexican Spotted Owl and Huachuca Water Umbel, with related restrictions. #262,264 - No habitat restr #263 - 3 candidate species, no restr ISR2 - TES issues adversely impact the mission.
Waste Management	No impact.	#269 No RCRA Subpart X Permit
Water Resources	Special restrictions or procedures are in place to significantly limit the production or distribution or potable water at the installation. Increased missions may result in additional restrictions or mitigation requirements. Minimal impact expected.	#276, 293 - No restrictions reported #278 - Subject to McCarren amendment (permits State courts to adjudicate Federal water rights claims under State law) #279 - Doesn't discharge to imp waterway #291 – 1 Gov't owned water treatment plant #297 – 1 gov't owned ww treatment plant #282 - No industrial ww treatment plant ISR2 - WW Mgt issues adversely impact the mission.
Wetlands	No impact.	#251- Survey completed 02/2000. #257 – Wetlands affect 1% of range but do not restrict operations.

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED)

SCEI #11

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Fort Huachuca
Environmental Restoration*	None.
Waste Management	None.
Environmental Compliance	None.
COBRA Costs:	None.

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI# 32 **TITLE: SCEI ON IOWA AAP**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

IND-0122v2_2	**Close Lone Star Army Ammunition Plant**	**Gain**
IND-0106v2	**Close Kansas Army Ammunition Plant**	**Gain**

ANALYST: _____ **UPDATE: 05/06/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Iowa AAP	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No Impact. In attainment for all criteria pollutants.	#213 – In attainment for all criteria pollutants #211 –No exceedences reported #212 - No exceedences reported #220 – Holds 1 Major Operating Permit (SIC code 9711, 3483) and has a Title V application on file with the State; however, a permit has not been issued. #222 – No Emissions Credit Trading program available #218 –Restrictions reported on open burning operations for installation due to IDNR regulations on open burning restrictions/ban.
Cultural/Archeological/Tribal Resources	Likely no impact due to no new construction required. Cultural resources currently restrict operations. Additional operations may impact these resources, which may lead to restrictions on these operations as well. Potential impacts may occur since resources must be evaluated on a case-by-case basis, thereby causing increased delays and costs.	#233- Installation 100% surveyed #235 – No historic prop identified #230 – 291 Known historic and prehistoric arch sites, restricts future construction and trng/opns. No restrictions within chain-link fenced production areas. Addit'l survey req'd on agricultural land if ground disturbance is > 8". All other areas require addit'l survey work for any ground disturbance. #231 – Native People sites identified #236 – No Progr. Agreement with SHPO #234 – 3 tribes assert interest in archaeological sites, rare interaction #232 – Areas with high arch potential identified
Dredging	No Impact - no dredging required for scenario.	#226, 227, 228 – Not applicable
Land Use Constraints/Sensitive Resource Areas	No Impact. Two SRAs identified but cause no restrictions.	#30 – 2,806 BA available, 0 required #201 – No constraints reported #256 – 2 Sensitive Resource Areas identified but cause no restrictions CERL-Moderate encroachment

Marine Mammals/ Marine Resources/ Marine Sanctuari	No impact	#248, #249 #250, #252, #253 - No restrictions
Noise	No impact - no major noise expected due to this proposal.	#239 – Installation does not have noise contours that extend off installation.
Threatened& Endangered Species/Critical Habitat	No impact. TES on installation include Indiana Bat (*Myotis sodalist*), which has delayed operations for training on smoke or blank ammunition from March 15 to October 31 and prohibits tree cutting from April 1 to September 30. Impacts 27% of installation. TES already restrict operations. Additional operations may further impact TES leading to additional restrictions on operations.	#259 – TES on installation include Indiana Bat (*Myotis sodalist*), which has delayed operations for training on smoke or blank ammunition from March 15 to October 31 and prohibits tree cutting from April 1 to September 30. Impacts 27% of installation. #260 – No critical habitat identified #261 – No Biological Opinion #262 – No development restrictions reported. #263, #264 – No candidate species/habitat reported #201 – No restrictions reported
Waste Management	No impact.	#269 – Installation has RCRA Subpart X OB/OD Permit, and Iowa AAP interim RCRA Part B permit for OB/OD, submitted 11/1988. #265- Has RCRA (TSD) facility. #272 –Has permitted solid waste disposal facility, 85% filled.
Water Resources	Likely No Impact. Wastewater permit modifications/pollution prevention measures due to additional workload may be required. Installation may need upgrades to industrial wastewater treatment systems for lead processing.	#276 – Installation not located over a sole-source aquifer #278 – McCarren Amend does not apply #293 – No potable water restrictions #291 –1 publicly owned off-installation plant for potable water. IREM indicates remaining capacity for potable water to support 4,385 personnel #279 –Installation does not discharge to impaired waterway #297 – Two On Military Installation Govt Owned Sewage Treatment Plants #282 – 1 Industrial Gov't owned wastewater treatment system located on installation. #822, 824, 825, 826, ISRII – no restrictions reported
Wetlands	No impact.	#251- Survey completed 08/99. #257 – Wetlands affect 0.6% of installation, restrict operations by avoiding wetlands if possible and obtain permit if required.

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED);
SCEI# 32

IMPACTS OF COSTS

Env Resource Area	Gaining Installation **Inst Name: Iowa AAP**
Environmental Restoration*	None
Waste Management	None
Environmental Compliance (CONT"D)	-Realignment NEPA – $1M (EIS- industrial) -Endangered Species Management (includes monitoring) -$20K-$2M
COBRA Costs:	-NEPA-$1M (EIS)

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #12 **TITLE: SCEI FOR FT JACKSON**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

E&T-0014v5	**Consol Reg Sch to Fort Jackson**	**Gain**
HSA-0133v2	**Joint Mob Sites**	**Loss**
USA-0046Rv2	**Single Drill SGT School**	**Gain**
USA-0131v3	**USAR C2 Proposal -Southeast**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Jackson	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Ft Jackson is currently in Non-Attainment area for Ozone. Added operations will require New Source Review permitting and Air Conformity Analysis.	#213,214,219 – Non-Attainment for O3 (8hr) #211 No permit or major source thresholds projected to be exceeded based on 1% increase at Ft Jackson. #212-No exceedences reported #220 Major operating permit ISR2 - No impact to mission.
Cultural/Archeological/Tribal Resources	92 cultural/archeological/historical properties/sites listed with restrictions on training and digging. 2 historical properties listed. 14 Native American tribes assert an interest in archeological sites. 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.	#230-232 - 92+ arch resource sites, with training/digging restrictions #233 - 99% surveyed; #234 - 14 tribes assert interest; in formal consultations #235 - 2 historic properties listed #236 - No programmatic agreement ISR2 No impact to mission.
Dr ed g- ing	No impact.	#226, 227, 228 – N/A
Land Use Constraints/ Sensitive Resource Areas	No impact.	#30 - Buildable Acres – 22 acres req'd, with 32,000 acres available (based on 1/2 size of a Large Admin Organ) #201,254,256 - No constraints. CERL Study – moderate encroachment projected
Mar ine Ma mm als/ Mar ine	No impact.	#248-253 – No restrictions
Noise	No impact	#239 - No noise zone acreage reported off-installation.

Threatened& Endangered Species/Critical Habitat	TES on installation include Red-cockaded Woodpecker, and Smooth Coneflower, with restrictions on land based training and digging of deliberate fighting positions. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.	#259 - TES include Red-cockaded Woodpecker, and Smooth Coneflower; smooth coneflower restricts land based training on <1% of land. #261- BO for Red Cockaded woodpecker indicates no digging of deliberate fighting positions within 200 ft of species. . #260,262-264 - No candidate species/habitat ISR2 - no impact.
Waste Manage ment	No impact.	#269 No RCRA Subpart X Permit - but none needed. #265-Has hazardous waste TSDF #272-No SWDF
Water Resources	No impact.	#276,278,279,293 - No restrictions #282 - No industrial ww plant #291 – Has 9 potable water production plants on-installation, and 1 off-installation (public owned) plant. #297,822 – 2 domestic ww treatment plants on installation ISR2 - no impacts IREM shows water infr can support 72,756 more people.
Wetlands	No impact. Wetlands already restrict operations. Additional operations may impact wetlands, which may lead to operations that are restricted.	#251 – survey 05/1996 #257 - 7% of range, 10% of installation has wetlands – restrictions reported (no filling permitted)

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);

SCEI #12

IMPACTS OF COSTS

Env Resource Area	Gaining Installation **Inst Name: Ft Jackson**
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-Air Conformity Analysis - $25K-$75K. -New Source Review analysis and permitting - $100K-$500K. -Endangered Species Management (includes monitoring) $20K-$2M -Re-alignment NEPA (EA) - $100K.
COBRA Costs:	Air Conformity Analysis - $50K. New Source Review Analysis and permitting - $100K. NEPA (EA) - $100K.

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI# 13 **TITLE: SCEI ON FT KNOX**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

HSA-0092Rv2	**Relocate Army Headquarters and Field Operating Agencies**	**Gain**
HSA-0135v2	**Regional Correctional Facilities**	**Loss**
HSA-0145v2	**Roll-up Mil Pers & Rec Ctrs for AR & AF**	**Gain**
MED-0054R	**Convert Inpatient Services to Clinics**	**Loss**
USA-0113R	**Fort Monroe, VA**	**Gain**
USA-0131v3	**USAR C2 Proposal -Southeast**	**Gain**
USA-0223Rv5	**Fort Monmouth, NJ**	**Gain**
USA-0243R	**Maneuver Training**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Knox	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact. Installation is in attainment area for all criteria pollutants.	#213 – Installation is in attainment area for all criteria pollutants. #211 - No major source thresholds projected to be exceeded #220 -Major operating permit (but no permit limits shown on #211) #218/ISR2 - No mission impact indicated.
Cultural/Archeological/Tribal Resources	194 historic properties listed. 1 Native American tribe has asserted an interest in archeological sites. Due to interest from Native American tribes, a 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 since there is no Programmatic Agreement in place.	#230-232 - No arch resources and not a high potential for archeological sites #233 - 32% surveyed; #234 - 1 tribe (Cherokee) asserts interest #235- 194 historic props #236 - No Programmatic Agreement ISR2 - No adverse impact to mission
Dred g-ing	No impacts	#226, 227, 228 – N/A
Land Use Constraints/Sensitive Resource Areas	No impacts.	#30 - Buildable Acres – 1321 acres available; approximately 116 acres req'd based on 2.7 large admin organizations #201, 254- no restrictions. #256 - 1 SRA, restricts development on 1.3% of inst CERL Study – moderate encroachment projected
Marine Mammals/Marine Resources/ Marine	No impacts	#248, 249, 250, 252, 253 – N/A

Noise	Operations are not currently restricted due to noise considerations, however noise associated with mission increase may result in increased noise off-installation. Further evaluation required.	#239 – 11,647 acres of Noise Zone 2 and 691 acres of Noise Zone 3 that extend off the installation, which is moderately encroached by development. ISR2- no restr
Threatened& Endangered Species/Critical Habitat	Three TES exist on main installation (Bald Eagle, Indiana Bat, Grey Bat), with no restrictions to operations. Additional operations may impact threatened / endangered species possibly leading to restrictions on training or operations	#259 – Three TES identified on main installation (Bald Eagle, Indiana Bat, Grey Bat), w/ no restr. #260-264 - No habitat/candidate species ISR2 shows no impact.
Waste Manage ment	No impacts	Q#269 – Installation does not have RCRA Subpart X permit
Water Resources	Installation / range is located over the recharge zone of a sole-source aquifer, which may result in future regulatory limitations on training activities.	#276 – over sole source aquifer #278, 279, 293 – No water restr IREM - infr can support 65K more people #291 –2 on-installation govt owned production plants #297 – 1 on-installation dom ww treatment plt #282 – no industrial ww treatment plts
Wetlands	No impacts	#251 - Survey dated 11/1994 #257 - Wetlands restrict less than 3% of the range and less than 3% of the main installation.

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED)

SCEI# 13

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Ft Knox
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	Knox: - Evaluation to determine if buildings/structures are significant - $1,000 to $2000 per building depending on size, complexity, and location. - Evaluation to determine if archeological/tribal site is significant - $15,000 to $40,000 per site -Develop Programmatic Agreement (PA) -$10K -Conduct Tribal govt to govt consultations - $2K-$10K per meeting. -ESA Consultation (BA Prep) $10K-$100K -Endangered Species Management (includes monitoring) $20K-$2M -Noise analysis and monitoring -$5K-$75K - NEPA EIS- (due to the training impact of a Bde Combat Team)- $1M
COBRA Costs:	Knox: NEPA (EIS) - $1M Noise Analysis - $20K

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI # 15 **TITLE: SCEI FOR FORT LEE**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

E&T-0016v2	**Culinary to Fort Lee**	**Gain**
E&T-0053v2	**Trans Mgmt School to Fort Lee**	**Gain**
E&T-0064v3	**CSS Center Fort Lee**	**Gain**
HSA-0053Rv2	**OSD 4th Est to Fort Belvoir and NNMC**	**Gain**
HSA-0109v2	**Consol DECA Regional Offices Fort Lee**	**Gain**
HSA-0133v2	**Joint Mob Sites**	**Loss**

ANALYST: _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Fort Lee	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No Impact. In Attainment for all NAAQS.	#213 - All NAAQS in Attainment. #211 Projected emissions appear to be with permit buffers (based on 75% increase at Ft Lee) #220 Synthetic Minor permit ISR2 - AQM adversely impacts mission #212-No top 5 HAPs reported #218 –No restrictions reported
Cultural/Archeological/ Tribal Resources	24 cultural/archeological sites and 3 historical properties listed, with some restrictions on training and/or operations reported. Cultural/archeological/tribal resources currently restrict operations. Additional operations may impact these resources and result in further restrictions on training or operations.	#230- 24 arch resource sites, with restrictions on training/operations; #232-Areas w/high potential for archaeological resources reported. #233 - 100% surveyed #234 - No tribes assert interest #235 - 3 historic properties listed #236 - Has programmatic agreement ISR2 - site restrictions impacting msn. #231-No Native People sites
Dredging	No Impact	#226, 227, 228 – N/A
Land Use Constraints/Sensitive Resource Areas	No Impact	#30 - Buildable Acres - 1,982 acres available, approximately 1,318 acres req'd (based on size of a 1.6 Large Schools) #201,254 - No new constraints. #256 - 1 SRA - no restr CERL Study – moderate encroachment projected
Marine Mammals	No Impact	#248, 249, 250, 252, 253 – N/A
Noise	Operations not currently restricted due to noise. However, noise caused by Ordnance School operations may result in significant impacts. Noise analysis and mitigation may be required.	#239 - 13 acres of Noise Zone 2, and 1 acre of Zone 3 extends outside installation, which is moderately encroached by development.

Threatened& Endangered Species/Critical Habitat	Ft Lee has critical habitat for the Bald Eagle that restricts <3% of total land. Restrictions involve limited access to training range during mating season, and restrictions on vehicle traffic. Additional operations may further impact critical habitat leading to additional restrictions on training or operations.	#260 - 1 habitat (Bald Eagle) affects 2.1% of land; restrictions to vehicle traffic near nests. (Limited access to training range during mating season; also a primary mgt zone must be maintained for 3 yrs after nest abandoned) #259, 261-264 - No TES/candidate species #201 - 126 acres restricted by critical habitat
Waste Manageme nt	No Impact	#269 Installation does not have a RCRA Subpart X permit, but not an issue since waste munitions management would likely occur on active ranges or EOD areas as part of training mission
Water Resources	No Impact.	#276,278,279,293 - No restrictions IREM shows water infr can support 28,562 more people. #291 –2 off-installation public owned production plants #297 – 1 off-installation dom ww treatment plt #282 – no industrial ww treatment plts ISR2 - WQM, WWQM mission impact reported
Wetland s	Wetlands already restrict operations. Additional operations may impact wetlands, which may lead to further operations/training restrictions.	#251 - No survey date #257 - No wetlands restrictions #201 - Wetlands restrict operations on 256.14 acres

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED)
SCEI #15

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Fort Lee
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-Realignment NEPA at gaining base $1M (EIS - based on cumulative nature of administrative realignments and moving of 7,000+ personnel to Fort Lee) -Evaluation of operational restrictions for jurisdictional wetlands - $10K - $200K -Noise Analysis and Monitoring - $5K - $75K. -Endangered Species Planning Level Survey, Species Mgt - $20K - $100K.
COBRA Costs:	Noise Analysis - $20K NEPA (EIS) - $1M

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #16 **TITLE: SCEI FOR FORT LEONARD WOOD**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

E&T-0029v4	**Prime Power**	**Gain**
USA-0046Rv2	**Single Drill SGT School**	**Loss**

ANALYST: _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Leonard Wood	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact. In attainment for all criteria pollutants.	#213 - All NAAQS in Attainment. #211 Emissions inventory shows permit limits exceeded for VOC, Nox, CO, and PM 10, and Major Source thresholds exceeded for VOC and CO. #220 No permit ISR2 - No impact to mission.
Cultural/Archeological/Tribal Resources	Over 550 archaeological resources with restrictions on soil disturbance. 34 historic properties identified. 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 exist to accommodate new construction and avoid cultural/archaeological/historical resources.	#230-232 - 550+ arch resource sites, with restrictions on soil disturbance #233 - 88% surveyed #234 - 3 tribes assert interest; no formal consultations #235 - 34 historic properties listed #236 - No programmatic agreement ISR2 shows access to sites impacts mission.
Dredging	No impact.	
Land Use Constraints/Sensitive Resource Areas	No impact.	Buildable Acres - <10 req'd (based on admin facilities associated with a small school) with 489 acres available (489 excludes tng & hsg BA) #201,254,256 - No constraints.
Marine Mammals/Marine	No impact.	
Noise	No impact - Negligible new noise attributed to this proposal. Minimal encroachment at installation.	#239 - 138 acres of Noise Zone 2 extends outside installation, which is minimally encroached by development.

Threatened& Endangered Species/Critical Habitat	Likely no impact. TES already restrict operations. Additional operations may further impact TES, leading to additional restrictions on operations. Sufficient buildable acres exist to accommodate new construction and avoid TES.	#259, 261- show impacts. TES include Indiana Bat, Gray Bat, Bald Eagle, <2% of training land impacted (mostly caves) #260,262-264 - No candidate species/habitat ISR2 shows impact.
Waste Management	No impact.	#269 No RCRA Subpart X Permit - but none needed.
Water Resources	No impact.	#276,278,279,293 - No restrictions ISR2 - no impacts IREM shows water infr can support 38,268 more people. #291- 1 On Military Installation Govt Owned Plant for potable water #297-1 On Military Installation Govt Owned Plant for sewage treatment #282-no industrial wastewater plant
Wetlands	No impact.	#251 - Survey completed 05/95 #257 - 2.5% of range has vehicle traffic restricted by wetlands.

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED);
SCEI #16

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Fort Leonard Wood
Environmental Restoration*	None.
Waste Management	None.
Environmental Compliance	-Develop Programmatic Agreement - $10K -Conduct tribal gov't-to-gov't consultation - $500-$2K per meeting -Re-alignment NEPA at gaining base: $100K (EA) (Based on moving pop of approximately 100 personnel) -Endangered Species Management (includes monitoring) -$20K-$2M
COBRA Costs:	NEPA (EA) - $100K.

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #17 **TITLE: SCEI FOR LETTERKENNY**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

DON-0165Rv4	**MCLB Barstow**	**Gain**
IND-0083Av2	**Realign Rock Island Arsenal**	**Gain**
IND-0083Bv2	**Realign Seal Beach**	**Gain**
USA-0036R	**Red River Army Depot, TX**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Letterkenny AD	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact expected. Letterkenny AD is in marginal non-attainment for Ozone, and exceeds Major Source thresholds for Pb, SO2, PM10 and PM2.5. Due to non-attainment status, Air Conformity Analysis and modifications to existing permits required.	#213 – In marginal non-attainment for Ozone (1-hour and 8-hour) #212- Exceeds Major Source Threshold for Hydrogen Chloride #211 –Exceeds Major Source thresholds for Pb and SO2, PM10 and PM2.5. #220 – Holds 1 Major Operating Permit (SIC code 9711 - Title V Permit # 28-5002) #222 – Emissions Credit Trading program available for NOx and VOCs #218 – No restrictions to operations reported due to air quality requirements
Cultural/Archeological/Tribal Resources	No impact	#233- 100% of installation has been surveyed for cultural resources. #235 – No historic prop identified #230 – 345 potential historical period sites which are foundations ruins of old demolished farmsteads. These buildings were demolished when Letterkenny was established in 1942-43. No restrictions reported. #231 – No Native People sites identified #236 – No Programmatic Agreement #234 – No tribal interest #232 –1855 acres were identified as potential high probability areas. ICRMP. Areas were determined based on predictive model.
Dredging	No impact	#226, #227, #228 – N/A

Land Use Constraints/Sensitive Resource Areas	No impact	#30 – 2,183 BA available – 0 acres required. Existing facilities can likely absorb proposed activities #201 – 1 Constraint identified on main base (“Other”(6) – altered modified or re-routed ground operations, per data call printout), no restrictions reported. #256 – No Sensitive Resource Areas identified CERL-minimal encroachment
Marine Mammals/ Marine Resources / Marine Sanctuaries	No impact	#248, #249, #250, #252, #253 - No restrictions
Noise	No impact	#239 – Installation does not have noise contours that extend off installation.
Threatened& Endangered Species/Critical Habitat	No impact	#259 – No TES listed #260 – No critical habitat identified #261 – No Biological Opinion #262 – No development restrictions reported. #263, #264 – No candidate species/habitat reported
Waste Management	No impact.	#269 – Interim RCRA Subpart X OB/OD Permit #265- No RCRA (TSD) facility. #272 – Not a permitted solid waste disposal facility
Water Resources	No impact	#276 – Installation not located over a sole-source aquifer #278 – McCarren Amend does not apply #293 – No reported potable water restrictions. #291 – Installation uses one On Military Installation Govt Privatized Plant IREM - remaining capacity for potable water to support 7,000+ personnel. #279 –Installation does not discharge to impaired waterway #297 – 1 On-Military Installation Privatized STP – Daily peak outflow permit exceedances reported #282 – On Military Installation Govt Owned Wastewater Treatment Plant #822, 824, 825, 826, ISRII – no restrictions reported
Wetlands	No impact	#251- Survey completed 10/99 #257 – Wetlands restrict 2% of installation but do not restrict operations.

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);

SCEI #17

IMPACTS OF COSTS

Env Resource Area	Gaining Installations **Inst Name: Letterkenny**
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	Letterkenny: -Air Conformity Analysis -$25K-$75K (includes no mitigation costs) -Realignment NEPA at gaining base – industrial-$1M (EIS)
COBRA Costs:	Letterkenny: -Air Conformity Analysis -$50K -Realignment NEPA-$1M (EIS)

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI # 18 **TITLE: SCEI ON FT LEWIS**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

HSA-0010Rv2	**Establish Joint Bases**	**Gain**
HSA-0133v2	**Joint Mob Sites**	**Gain**
HSA-0135v2	**Regional Correctional Facilities**	**Loss**
MED-0022	**McCord Med to Lewis**	**Gain**
USA-0166v3	**USAR C2 Proposal - NORTHWEST**	**Gain**

ANALYST: _____ **LAST UPDATE: 05/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft. Lewis	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impact. Currently in Maintenance status for PM 10 and CO and in Attainment area for all other criteria pollutants.	#213 – Installation is in attainment for NO2 and SO2 and "Maintenance" mode for PM10 and CO. "Unclassifiable" for PM2.5, lead, Ozone (8-hour). However, EPA website shows no pollutants in Non-Attainment for Pierce County (Fort Lewis). #211/212 - No permit/Major Source thresholds projected to be exceeded #220 -Major operating permit #218/ISR2 - No mission impact indicated.
Cultural/Archeological/Tribal Resources	Installation has 248 archeological/cultural resources reported, with potential restrictions to future construction. 415 historic properties listed. 5 Native American tribes assert an interest in archeological sites. Cultural resources are impacting mission. Due to interest from Tribes, a potential impact may occur as a result of increased time and delays and negotiated restrictions. Since there is no Programmatic Agreement in place potential impacts may occur, since 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, which may lead to increased delays and costs. Likely no impact due to no new construction.	#229 No cemeteries imposing restrictions #230-231 248 archeological resources limiting future construction and training, native people sites (burial sites) #232 High potential for archeological sites #233-234 – 82.5% surveyed; #234 - 5 tribes (Nisqually, Puyallup, Squaxin, Yakima, Coleville Confederated) assert interest and in formal consultation. #235- 3 Historic Districts with 415 historic properties #236 - No Programmatic Agreement ISR2 - Adverse impact to mission (Amber) #201 – No constraints on operation
Dred g-ing	No Impact	#226, 227, 228 – N/A

Land Use Constraints/Sensitive Resource Areas	No Impact	Buildable Acres – 5,912 acres available, 0 acres req'd #254, 256 - No SRAs that restrict development ISR – No impacts/restrictions CERL – Moderate to High Encroachment Projected
Marine Mammals/Marine Resources/	No Impact	#248-253 – No restrictions
Noise	No Impact	#239 – No noise contours extend off installation.
Threatened& Endangered Species/Critical Habitat	TES on installation include Bald Eagle, Bald Eagle YTC, Water Howellia, Northern Spotted Owl, Spring Chinnok Salmon, with restrictions on land based training and digging of deliberate fighting positions Specifically, 72 acres of training land are impacted and 60% of the installation is impacted. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.	#249 – Salmon (Endangered Species – Marine) restricts less than one acre. #259 – Five TES species identified on main installation (Bald Eagle, Bald Eagle YTC, Water Howellia, Northern Spotted Owl, and Spring Chinnok Salmon), w/ limited restr. on ranges. 72 acres impacting training and 60% of installation impacted. #260-262 – Critical habitat in place that does not restrict missions, biological opinion in place that does not impose restrictions. #263 – 5 Candidate Species: Taylor's Checkerspot, Mardon Skipper, Streaked Horned Lark, Mazama Pocket Gopher ISR2 shows no impact. #264 – No proposed candidate critical habitat
Waste Management	No Impact	Q#269 – Installation does not have RCRA Subpart X permit
Water Resources	No Impact. Installation is located over or in the recharge zone of sole-source aquifer, which may result in future regulatory limitations on training activities.	#276 – over sole source aquifer #278, 279, 293 – No water restr IREM - infr can support 28K more people, #822 - dom ww treatment plant #291- 1 On Military Installation Govt Owned Plant for potable water #282- no industrial waste water plant #297 - 1 On Military Installation Govt Owned Plant for sewage treatment
Wetlands	No Impact	#251, 257 - Installation surveyed for wetlands and wetlands restrict less than 15% of the range.

SUBJECT: SUMMARY OFCUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED)
SCEI #*18*

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Ft Lewis
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-Conduct Tribal govt to govt consultation - $2000 per meeting. -Develop Programmatic Agreeement -$10K -Endangered Species Management (includes monitoring) - $20K-$2M -Re-alignment NEPA - Environmental Assessment (EA) at gaining base - $100K
COBRA Costs:	NEPA (EA) - $100K.

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #36 **TITLE: SCEI FOR MCALESTER AAP**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

IND-0106v2	**Close Kansas Army Ammunition Plant**	**Gain**
IND-0113v2_2	**Realign Sierra Army Depot**	**Gain**
IND-0122v2_2	**Close Lone Star Army Ammunition Plant**	**Gain**
USA-0036R	**Red River Army Depot, TX**	**Gain**
USA-0229v3	**RC Transformation in OK**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	*Gaining* Installation Assessment Inst Name: McAlester AAP	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Likely No Impact. Although no transfer of personnel, permit and threshold exceedences have been reported. Additional activity will require Air Conformity Analysis.	#211 – Threshold exceedences reported for PM10 and VOC #212-Exceed major source threshold for Manganese #213 In attainment for CO and Ozone (1 hour) rest are "unclassifiable" (Per EPA website, considered in attainment) #218/ISR2 No mission impact indicated #220 Major Operating Permit, Title V permits for installation.
Cultural/Archeological/Tribal Resources	Potential impacts may occur, since resources must be evaluated on a case-by-case basis, thereby causing increased delays and costs. Due to tribal interest, increased time delays and negotiated restrictions may occur. 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. However, considering the size of the planned facility and available unconstrained land, impacts are unlikely.	#201 No constraints #229, 231 No cem/native people's sites #230 No arch resources identified. #232- High potential for arch sites #233 – 4.45% of installation surveyed #234 – Choctow, Caddo, Quapaw, Whichita, Chickasaw, have asserted interest in some archeological resource #235 – 5 Historic districts identified with 210 historic properties #236 – No Prog. Agreement in place ISR2 - no adverse impact to mission.
Dre dg-ing	No Impact	No dredging impacts for this scenario.
Land Use Constrain ts/Sensiti ve Resource Areas	No Impact	#30 - 28,290 buildable acres available, 7 acres required for RC building #254 -No SRAs restricting training/mission #256 -No SRAs nearby CERL-Minimal Encroachment

Marine Mammals /Marine Resources/ Marine Sanctuaries	No Impact	There are no impacts to marine resources from this proposal.
Noise	No Impact	#239 - No Noise contours that extend offsite.
Threatened& Endangered Species/Critical Habitat	No Impact. TES on installation include American Burying Beetle and restrict operations. Additional operations may further impact TES, leading to additional restrictions on operations.	#249 - No restrictions #259 - 1 species (American Burying Beetle) inhabits main installation area (soil disruptions of >5 acres must be coordinated with USFWS) #260 - No critical habitat #261 - No biological opinion #262 - No restrictions #263, 264 - No candidate species, no proposed habitat
Waste Management	No Impact	#269- Installation has a RCRA X Permit (interim or final status not specified) #265 – Has hazardous waste TSD facility (RCRA Part B Permit) #272 – Has SWDF; 33% filled
Water Resources	Likely 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. Wastewater permit modifications/pollution prevention measures due to additional workload likely required.	#276 Installation not over a recharge zone #278 Not subject to McCarren Act #279 Installation discharges to an impaired waterway (organic loading), but current operations do not further impair waterway #293 No potable water restrictions #282 Installation uses one On Military Installation Gov't-Owned Plant for industrial wastewater treatment #297 – Installation uses one On Military Installation Gov't-Owned STP #291-1 On Military Installation Gov't-Owned Plant for potable water IREM -infrastructure can support additional 1,974 personnel
Wetlands	No Impact	#251 Installation surveyed 9/20/99 #257 6.86% of installation is constrained by wetlands.

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED);
SCEI #36

IMPACTS OF COSTS

Env Resource Area	Gaining Installation **Inst Name: McAlester AAP**
Environmental Restoration*	None for both installations.
Waste Management	None for both installations.
Environmental Compliance	**McAlester:** -Air Conformity Analysis -$25K-$75K (incl no mitigation costs) -Archaeological/tribal resources inventory -$25-$100 per acre -Historic building/structure inventory -$500-$1,500 per building/structure depending on size, quantity and location -Evaluation to determine if arch/tribal site(s) is significant -$15K-$40K per site -Evaluation to determine if historic buildings/structures are significant -$1K-$2K per building depending on size, complexity and location -Develop PA -$10K -Conduct Tribal gov't-to-gov't consultation -$500-$2K per meeting -Realignment NEPA – $1M (EIS- industrial) -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
COBRA Costs:	**McAlester:** -Air Conformity Analysis -$50K -Realignment NEPA – $1M (EIS- industrial)

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #19 **TITLE: SCEI FOR FT MCCOY**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

USA-0243R	**Maneuver Training**	**Loss**
USA-0166v3	**USAR C2 Proposal - NORTHWEST**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/06/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft McCoy	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No impacts.	#213 – Installation is in attainment for all criteria pollutants. #211 - No permit/Major Source thresholds projected to be exceeded #220 - Synthetic Minor operating permit #218/ISR2 - No mission impact indicated. #212-no exceedences reported
Cultural/Archeological/Tribal Resources	Potential impacts may occur, since resources must be evaluated on a case-by-case basis, thereby causing increased delays and costs. Archaeological resources currently restrict operations. Additional operations may impact these resources, which may lead to additional restrictions.	#229 No cemeteries imposing restrictions #230 1 archeological resource (burial site) impacting mission, limiting future construction and training #231-Native People sites identified #232-High potential for archaeological resources #233– 22% surveyed; #234 - 1 tribe (Ho Chunk Nation) assert interest and in formal consultation. #235- 2 historic properties #236 - No Programmatic Agreement ISR2 – No Adverse impact to mission
Dre dg-ing	No impacts.	
Land Use Constraints/ Sensitive Resource Areas	No impacts. Sufficient buildable acres exist for new construction. Units will not be performing additional training, only admin/ HQ activities.	Buildable Acres - 43 req'd, 1,268 acres available (based on 1.0 large Admin Org). #254, 256 - 1 SRA that restricts training. ISR – No impacts/restrictions #201 – No constraints on operation CERL – Moderate encroachment
Marin e Mamm als/Ma rine Resou rces/	No impacts.	
Noise	No impacts.	#239 – 3,182 acres of Noise Zone II and 65 acres of Noise Zone III extend off-installation that is moderately encroached by development

Threatened& Endangered Species/Critical Habitat	TES on installation include Bald Eagle, Karner Butterfly, Grey Wolf, restricting 0.05% of installation. Biological Opinion in place that imposes restrictions on mission TES already restrict operations. Additional operations may further impact TES, leading to additional restrictions.	#249 – None #259 – Three TES species identified on main installation (Bald Eagle, Karner Butterfly, Grey Wolf) with 0.05% of installation restricted. #260-262 – No Critical habitat in place; biological opinion in place that does impose restrictions on mission, but does not restrict future development. #263 – No candidate species ISR2 shows no impact. #264 – No proposed candidate critical habitat
Waste Management	No impacts. Incoming personnel do not need OB/OD area.	Q#269 – Installation does not have RCRA Subpart X permit
Water Resources	No impacts	#276 – Not over sole source aquifer #278, 279, 293 – No water restr IREM - infr can support 26K more people, 639 personnel are added. #822 - dom ww treatment plant #291-3 On Military Installation Govt Owned Plants for potable water #297-1 On Military Installation Govt Owned Plant for sewage treatment #282-No industrial wastewater trmt plant
Wetlands	No impacts. No additional training expected and sufficient amount of unconstrained land available.	#251-Survey complete 09/93 257 - Wetlands restrict less than 16.4% of the main installation.

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);

SCEI #19

IMPACTS OF COSTS

Env Resource Area	Gaining Installation **Inst Name: Ft McCoy**
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	- Develop Prog. Agreement - $10,000 - Tribal govt to govt consultation -$500 to $2K -Evaluation to determine if archaeological site is significant –$15K-$40K per site depending on size, complexity and location -Evaluation to determine if historical buildings are significant -$$1K-$2K depending on size, complexity and location - Endangered Species Management -$20K-$2M 1 NEPA Record of Environmental Consideration (REC) for Fort McCoy - $5,000
COBRA Costs:	NEPA REC for Fort McCoy = $5,000

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI #20 **TITLE: SCEI FOR FT MEADE**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

HSA-0045v2	**DISA to Fort Meade**	**Gain**
HSA-0071v3	**Media & Pubs to Ft. Fort Meade**	**Gain**
HSA-0099v2	**Collocate Def-MILDEP Adj Act Fort Meade**	**Gain**
USA-0223Rv5	**Fort Monmouth, NJ**	**Gain**

ANALYST _____ **LAST UPDATE: 5/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft. Meade	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact expected. Ft Meade is in Non-attainment for Ozone (Moderate) and PM 2.5. Added operations will require New Source Review permitting and Air Conformity Analysis.	#213 – Installation is in Non-attainment area for Ozone and PM2.5. #211 - No permit/Major Source thresholds projected to be exceeded (based on 15% increase in emissions at Ft Meade) #220 - Synthetic Minor operating permit #218/ISR2 - No mission impact indicated
Cultural/Archeological/Tribal Resources	One cultural/archeological site is reported which is restricted from disturbance by training, operations, or construction. 15 historical properties are listed. Surveys need to be completed to determine impacts. The extent of cultural resources on this installation and impacts to these resources is uncertain. Cultural / archeological resources currently restrict operations. Additional operations may impact these resources and result in further restrictions on training or operations.	#230 - 1 Arch site with training & construction restrictions #231,234 - No Native People's sites or interest asserted #232- High potential for arch resources #233 – 0% surveyed #235- 15 historic properties #236 - Has Programmatic Agreement ISR2 – No Adverse impact to mission
Dr ed g- ing	No Impact.	#226, 227, 228 – N/A
Land Use Constraints/Sensit ive Resource Areas	No Impact.	#30 - Buildable Acres - 1,270 acres available, approximately 287 acres req'd, (based on estimate of 6.7 times the size of a large Admin Org). #254, 256 - No SRAs #201/ ISR2 – No impacts/restrictions CERL Study – moderate encroachment projected
Marine Mamma ls/Marin e Resour ces/ Marine	No Impact.	#248,249,252,253 – No restrictions #250 - Fresh water section of Little Patuxent River fish spawning area is restricted from disturbance.
Noise	No Impact.	#239 – No noise contours extend off installation.

Threatened& Endangered Species/Critical Habitat	No Threatened and Endangered Species are listed at Ft Meade, however, two Biological Opinions have been issued that impose restrictions on installation and range operations. Additional operations may further impact sensitive habitats and may lead to additional restrictions on training or operations.	#259, 260 – No TES or critical habitat #261,262- 2 Biological Opinions (Conserve Forested Wooded Lots, Preserve Sensitive Habitat) impose restrictions on the installation & training ranges, and impede development. #263, 264 – No candidate species, or Critical Habitat ISR2 shows no impact.
Waste Management	No Impact.	Q#269 – Installation does not have RCRA Subpart X permit
Water Resources	No impact.	#276, 278, 279, 293 – No water restrictions #824, 825 Adequate water available IREM - infr can support 83K more people. #291 – Has 1 potable water production plant on-installation #297 – Installation uses 1 On Military Installation plant for sewage treatment #282 - No industrial ww treatment plant
Wetlands	No impact.	#251- Survey completed 06/1996 #257 - 3% of installation is wetland restricted

SUBJECT: SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED)
SCEI # 20

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Ft. Meade
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	- Air Conformity Analysis -$25K-$75K - New Source Review - $100K-$500K -Archeological/tribal resources inventory - $25 - $100 per acre depending on location and ground cover. - Historic building/structure inventory - $500 - $1500 per building/structure depending on size or location. - Evaluation to determine if archeological/tribal site(s) are significant $15K-$40K per site. -Evaluation to determine if historic buildings/structures are significant - $1000-$2000 per building depending on size, complexity, and location. -Re-alignment NEPA at gaining base - $400K
COBRA Costs:	Air Conformity Analysis $50K New Source Review $100K NEPA (EA) - $400K.

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI # 39 **TITLE: SCEI ON MILAN AAP**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

IND-0106v2	**Close Kansas Army Ammunition Plant**	**Gain**
IND-0122v2_2	**Close Lone Star Army Ammunition Plant**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/06/2005**

Env Resource Area	*#2 Gaining* Installation Assessment Inst Name: Milan AAP	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No Impact – No new construction planned.	#211 – No exceedences reported for known criteria pollutants. #212-No exceedences reported #213 In attainment for all pollutants #218/ISR2 No mission impact indicated #220 Major Operating Permit, Title V permits for installation.
Cultural/Archeological/Tribal Resources	No Impact due to no new construction required.	#229 Cemeteries are present #230 11 unspecified sites of high archeological interest which do not impact mission or land use #231 Native people sites identified #232-Areas with high potential for archaeological resources identified #233 7.2% of the installation surveyed #234 No tribes have asserted interest #235 1 Historic District identified #236 Programmatic agreement in place
Dredg-ing	No Impact	No dredging impacts for this scenario.
Land Use Constraints/Sensitive Resource Areas	No Impact	#30/#198 1,848 buildable acres available; 0 needed. #201 No constraints #254, #256 No SRA restricting training/mission
Marine Mammals/Marine Resources/ Marine	No Impact	There are no impacts to marine resources from this proposal.
Noise	No Impact.	#239 106 acres of Noise Zone III and 994 acres of Noise Zone II extend off installation, which is moderately encroached by development.
Threatened& Endangered Species/Critical	No Impact	#249, 259, 260 No TES or critical habitat and no restrictions present. #261 thru 264 No biological opinions, no candidate species.

Waste Management	No Impact	# 269. Gaining installation has a RCRA X Permit (interim status) #272-Permitted SWDF #265-Permitted Hazardous waste TSDF
Water Resources	No Impact. Wastewater permit modifications/pollution prevention measures may be required due to additional workload.	#276 Installation not over a recharge zone #278 Not subject to McCarren Act #279 Installation does not discharge into impaired waterway #291- 1 On Military Installation Gov't-Owned Plant for potable water #292 Significant capacity remains in potable water - IREM reports infrastructure can support additional 742 people #293 No restrictions reported #297 Significant capacity remains for municipal and industrial effluent #282-Installation has one On Military Installation Gov't-Owned Plant for industrial wastewater
Wetlands	No Impact	#257 1.6% of installation is restricted by wetlands – specifics on restrictions not provided #251-Survey complete

SUBJECT: SUMMARY OFCUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED)
SCEI #39

IMPACTS OF COSTS

Env Resource Area	Gaining Installation **Inst Name: Milan**
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-Realignment NEPA at gaining base industrial-$1M (EIS)
COBRA Costs:	NEPA-$1M (EIS)

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #30 **TITLE: SCEI FOR MOFFETT FIELD (US ARMY RESERVE SITE)**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

USA-0168v3_2	**USAR C2 Proposal – SOUTHWEST**	**Gain**
USA-0240	**Transform RC Facilities in CA**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/06/05**

	***Gaining* Installation Assessment Moffett Field Joint Forces, Moffett Field, CA (Existing Army Reserve Center)**
Environmental Resource Areas Air Quality; Cultural/Archeological/Tribal Resources; Dredging; Land Use Constraints/Sensitive Resource Areas; Marine Mammals/Marine Resources/Marine Sanctuaries; Noise; Threatened & Endangered Species/Critical Habitat; Waste Management; Water Resources; Wetlands	No impacts. 30 Administrative and 10 Family Housing Buildable acres available, less than 10 acres needed for new MILCON
Compliance (e.g., pollution prevention, air permits, etc.)	No Impacts NEPA EA at Joint Forces Reserve Center, Moffett Field, CA. EA required due to large number of personnel involved.
Restoration (AEDBR data, CERCLA work)	
Waste Management (RCRA – Haz. Waste, OB/OD areas, radiological, etc.)	
COBRA Costs:	1 NEPA Environmental Assessment (EA) = $100,000 TOTAL = $100,000

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS [TABS FINAL]

SCEI # 21 **TITLE: SCEI ON REDSTONE ARSENAL**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

E&T-0064v3	CSS Center Fort Lee	Loss
HSA-0047Rv2	MDA/USA MSL to Redstone Arsenal	Gain
HSA-0092Rv2	Relocate Army Headquarters and Field Operating Agencies	Gain
S&S-0035Rv2	ICP to DLA	Loss
TECH-0005Rv2	Jt Rotary Wing Platforms	Gain
TECH-0013	Jt. Ctr for Land Veh RDAT&E	Loss
USA-0121R	Fort Gillem, GA	Gain
USA-0223Rv5	Fort Monmouth, NJ	Gain

ANALYST: _____ **LAST UPDATE: 05/09/2005**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Redstone Arsenal	Analyst Comments (& data source(s) that drive assessment)
Air Quality	In attainment for all NAAQS. No impact.	#213 – In Attainment for all Criteria Pollutants. #211 –No permit thresholds projected to be exceeded based on 13% 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 identifed #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
Dred g-ing	No Impact	#226, 227, 228 – N/A

Land Use Constraints/Sensitive Resource Areas	No impact.	#30 -3,229 Buildable Acres available, approximately 115 acres req'd (based on final integration memo data) #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	No Impact	#248, 249, 250, 252, 253 – N/A
Noise	Operations are not currently restricted due to noise considerations, however increased noise from Aviation operations may result in operational restrictions on the installation. Further evaluation is required.	#239 - 4339 Noise Zone 2 and 693 Zone 3 acres extends off-installation, which is moderately encroached by development.
Threatened& Endangered Species/Critical Habitat	TES on installation include Prices potato bean (*Apios priceano*), Bald Eagle (*Haliaeetus leucocephalus*), Indiana Bat (*Myotis sodalis*), Gray Bat (*Myyotis grisescens*), Alabama Cave Shrimp (*Palaemonias alabamae*) and American Alligator (*Alligator mississippiensis*). 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. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.	#259 – TES on installation include Prices potato bean (*Apios priceano*) (restricts .03% of land), Bald Eagle (*Haliaeetus leucocephalus*), Indiana Bat (*Myotis sodalis*), Gray Bat (*Myyotis grisescens*), Alabama Cave Shrimp (*Palaemonias alabamae*) (restricts 0.4% of land) and American Alligator (*Alligator mississippiensis*). #260, 261, 262, 263 - No critical habitat, no development restrictions, no candidate species, no Biological Opinion.
Waste Management	No Impact.	#269 – Has RCRA Subpart X Permit. #265 – Has RCRA Permitted TSD facility #272 – Has permitted SWDF at 25% capacity
Water Resources	No impact	#276 – Not in recharge zone of sole source aquifer #278 – Not subject to McCarren Amendmt #293 – No previous restrictions. IREM indicates installation can support 15,699 additional personnel #279 – Does not discharge into impaired waterway. #291 –2 on-installation gov't owned plants #297 – 1 on site wastewater treatment plt #282 – No industrial wastewater trmt plant

Wetlands	No impact.	#251 – Wetlands survey completed 03/02 #257 – Jurisdictional wetlands restricts 25% of installation where a permit is required for dredge and fill operations.

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED)

SCEI #21

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Redstone Arsenal
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-Realignment NEPA at gaining base (EIS - based on cumulative nature of Admin, RDTE, and Aircraft Operations) - $1M -Conduct Tribal govt to govt consultation - $500-$2K per meeting. -Develop PA -$10K -Evaluation to determine if archeological/tribal site(s) are significant $15K-$40K per site. -Evaluation to determine if historic buildings/structures are significant - $1000-$2000 per building depending on size and location. -Mitigation of archeological site by data recovery iaw PA - $25K-$500K per site depending on complexity -Mitigation of historic buildings/structures by HABS/HAER recordation iaw PA - $25K-$500K per site depending on complexity -Noise analysis and monitoring - $5K-$75K. -Endangered Species Management (includes monitoring) - $20K-$2M. -ESA Consultation (BA Prep) $10K-$100K
COBRA Costs:	NEPA (EIS) - $1M Noise analysis and monitoring - $20K

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #29 **TITLE: SCEI FOR FT RILEY**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

HSA-0031v2	**Consolidate CPOs**	**Gain**
USA-0221v4	**Operational Army (IGPBS)**	**Gain**

ANALYST: _____ **LAST UPDATED: 5/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Riley	Analyst Comments (& data source(s) that drive assessment)
Air Quality	The receiving installation is in attainment for all NAAQS.	#213 – Attainment for all criteria pollutants #211 –No permit thresholds reported #220 -Has a Major Operating/Title V Permit #218 - No restrictions
Cultural/Archeological/Tribal Resources	232 Archeological/tribal/burial/sacred sites identified, some of which restrict training with a limitation on vehicle traffic and tactical digging. 295 historic properties. Five Native American tribes have asserted interest. Potential impact may occur as a result of increased time delays and negotiated restrictions. Cultural / archeological / tribal resources currently restrict operations. Additional operations may impact these resources and result in further restrictions on training or operations.	#230-232 – Arch sites, Native People sites & high potential sites reported with restrictions on tactical digging and vehicle use in training/cantonment areas #233 - 28% surveyed; #235- 295 historic properties #236 – Has prog agreement; #234 - 5 tribes assert interest, 2 in formal consultation. ISR2 - no adverse impact to mission.
Dr ed g- ing	No Impact	#226-228 – No restrictions
Land Use Constraints/Sensit ive Resource Areas	No impact.	#30 - Buildable Acres - >2624 acres available without using housing /training land, 428 required (based on approximate equivalent of 2 Heavy Brigades) #201, 254, 256 - no restr/coordination required CERL Study – minimal encroachment projected
Mar ine Ma mm als/ Mar ine	No Impact	#248-253 – No restrictions

Noise	Potential impact. Operations are currently restricted due to noise considerations. Adding 1 brigade-sized unit increases noise generating activities, so future operations may be restricted as well. Further evaluation required.	#201-Live firing by active component unit is restricted (per installation command generated policy) between 0001 and 1200 hours on Sundays. Applies only to Active Component units, not to NG or RC units. #239 – 81 Noise Zone 2 acres and 14 Noise Zone 3 acres extend off-installation, which is minimally encroached by development.
Threatened& Endangered Species/Critical Habitat	4 Federally listed species on installation, with some restrictions to 5% of land for Bald Eagle and Topeka Shiner (fish). Restrictions include limitations on public works projects during winter eagle roosting, and training controls next to Topeka Shiner streams, with tank trail maintenance and stream crossings limited during Topeka Shiner spawning season. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.	#259 lists 4 species with restrictions for two species – for the Bald Eagle, 2% land restricted; for Topeka Shiner, 3% of land restricted (trng controlled next to Topeka Shiner streams) #261- BO restricts tank trail maintenance and stream crossings during Topeka Shiner spawning season #260-262-264 - No critical habitat or candidate species restrictions
Waste M	No impact.	#269 Has RCRA Subpart X Permit
Water Resources	No impact.	#276- Not over a recharge zone #278, 293 - No previous restrictions IREM - water infr can support 42K additional personnel #279 - Doesn't discharge to imp waterwy. #282 - 1 industrial ww plant #291 – Has 2 potable water production plants on-installation #297,822 – 4 domestic ww treatment plants on installation
Wetlands	No impact.	#257 - No wetlands restrictions reported.

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);

SCEI #29

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Ft Riley
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-Realignment NEPA -$1M (EIS) -Mitigation of archeological site by data recovery IAW PA - $25K-$500K per site depending on complexity -Evaluation to determine if historic buildings/structures are significant - $1000-$2000 per building depending on size and location. -Evaluation to determine if archaeological/tribal site(s) are significant $15K-$40K per site. -Conduct Tribal govt to govt consultations - $2K-$10K per meeting. -Noise analysis and monitoring -$5K-$75K -Endangered Species Management (includes monitoring) $20K-$2M - ESA Consultation (Biological Assessment Prep) – $10K to $100K/2 – 12 months -Endangered Species planning level survey -$20K-$100K/2-6 months
COBRA Costs:	Realignment NEPA -$1M (EIS) Noise analysis -$20K

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #23 **TITLE: SCEI FOR ROCK ISLAND ARSENAL**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

HSA-0018v5	**Consolidate DFAS 24 Central and Field Operating Sites into 3 Sites**	**Loss**
HSA-0031v2	**Consolidate CPOs**	**Loss**
HSA-0092Rv2	**Relocate Army Headquarters and Field Operating Agencies**	**Loss**
IND-0083Av2	**Realign Rock Island Arsenal**	**Loss**
IND-0110v2	**Close Mississippi Army Ammunition Plant**	**Gain**
IND-0112v2	**Close Riverbank Army Ammunition Plant**	**Gain**
S&S-0035Rv2	**ICP to DLA**	**Loss**
USA-0121R	**Fort Gillem, GA**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	*Gaining* Installation Assessment 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
Dre dg- ing	No impact	#226-228 – N/A
Land Use Constraint s/Sensitiv e 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
Marin e Mamm als/Ma rine Resou rces/	No Impact	#248-250, 252, 253 – N/A
Noise	No impact	#239 - No noise contours off-installation
Threaten ed& Endange red 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 Manage ment	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);]

SCEI #23

IMPACTS OF COSTS

Env Resource Area	Gaining Installation **Inst Name: Rock Island Arsenal**
Environmental Restoration*	None.
Waste Management	None.
Environmental Compliance	-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
COBRA Costs:	-Realignment NEPA at gaining base –$100K (EA)

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #24 **TITLE: SCEI FOR FT RUCKER**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

TECH-0005Rv2	**Jt Rotary Wing Platforms**	**Loss**
E&T-0062v3	**Aviation Log to Fort Rucker**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/06/2005**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Rucker	Analyst Comments (& data source(s) that drive assessment)
Air Quality	No Impact. Installation is in attainment for all criteria pollutants. Additional operations appear to be within operating permit buffers.	#213 – Installation is in attainment area for all criteria pollutants. #211 – Major Source thresholds not projected to be exceeded (based on 20% of emissions at Ft Eustis). #220 -Major Operating Permit held #218/ISR2 - No mission impact indicated.
Cultural/Archeological/Tribal Resources	10 arch/cultural resources, but no restrictions to tng/operations/construction. Due to interest from Native American tribes, a 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 since there is no Programmatic Agreement in place. Likely no impact due to sufficient buildable acres to accommodate new construction.	#229- No limitations to fee simple ownership #230, 10 arch resources (pre-historic Indian camp sites), but no restrictions to tng/opns reported 231-No Native People sites 232 – No areas with high potential for archaeological resources identified. #233, 100% surveyed #234 - No tribes assert interest #236 - No prog. agreement ISR2 - no adverse impact to mission.
Dredg-ing	No Impact	#228 - No impacts to dredging expected w/ proposal.
Land Use Constraints/Sensitive Resource Areas	No Impact	Buildable Acres –approximately 800 req'd, (based on 1 large school) approx 1,141 acres available. #201, 254, 256 - no restr., no SRAs
Marine Mammals/Marine Res	No Impact	
Noise	No Impact	#239 - No noise contours off-installation. ISR II – No impacts to missions due to noise restrictions
Threatened& Endangered Species/Critical Habitat	No Impact. TES include American Alligator, but no restrictions in place.	#259 lists American Alligator as TES but no restrictions #260-264 - No critical habitat/ no biological opinions/candidate species ISR2 shows no impact.

Waste Management	No Impact	#269 No RCRA Subpart X Permit, none needed since AV Log school does not need to manage waste munitions
Water Resources	No impact.	#276 – Not over sole source aquifer #279 – No discharges to imp waterways #276,278 No restrictions IREM – infr. can support up to 20,000 #822 - Dom & Ind ww treatment plant #291-1 On Military Installation Govt Owned Plant for potable water #297-2 On Military Installation Govt Owned Plants for sewage treatment #282- 2 On Military Installation Govt Owned Plants for industrial wastewater
Wetlands	No Impact	#251,-survey completed 12/95 257 – 5.9% wetland restricted acres, with normal restrictions (constr, dredging, tng).

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);

SCEI #24

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Ft Rucker
Environmental Restoration*	None.
Waste Management	None.
Environmental Compliance	-Conduct Tribal gov't-to-gov't meetings$500-$2,000 per meeting -Develop PA -$10K -Endangered Species Management (includes monitoring) $20K-$2M -Re-alignment NEPA (EA) - $400K.
COBRA Costs:	NEPA (EA) - $400K.

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI # 25 **TITLE: SCEI ON FT SAM HOUSTON**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

DON-0033R	**SUBASE New London**	**Gain**
HSA-0010Rv2	**Establish Joint Bases**	**Loss**
HSA-0092Rv2	**Relocate Army Headquarters and Field Operating Agencies**	**Gain**
MED-0002Rv2	**National Capital Region**	**Gain**
MED-0016Rv2	**San Antonio Region**	**Gain**
MED-0028Rv2	**Create Joint Centers of Excellence for Chem, Bio and Med RDA**	**Gain**
MED-0057Rv2	**Brooks City Base, TX**	**Gain**
USA-0222R	**Fort McPherson, GA**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft. Sam Houston	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact Expected. Addition of operations at the receiving installation will require New Source Review permitting and an Air Conformity Analysis for VOCs. A more detailed emission analysis will be required to determine regulatory impact of new activities.	#213 – in attainment for all NAAQS. #211 - Permit threshold for VOCs projected to be exceeded. - (based on 40% increase in emissions at Sam Houston) #220 - Minor Operating Permit (natural minor) #218/ISR - No mission impact indicated.
Cultural/Archeological/Tribal Resources	344 Archeological sites and 895 historic properties listed, with no restrictions on operations and/or training. 4 non-local tribes assert interest in archeological/sacred sites. Due to interest from tribes, a potential impact may occur as a result of increased time delays and negotiated restrictions and resources must be evaluated on a case-by-case basis, thereby causing increased delays and costs.	#233- 80% of installation has been surveyed for cultural resources #235 –895 Historic props identified #230 – 344 arch resources reported on installation sub-post, Camp Bullis, not on Sam Houston. #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	Future encroachment around the installation may adversely impact mission.	#30 – 1,176 BA available – approximately 590 required (based on SF from moving 13 large admin organizations) #201 – No constraints reported #256 – No Sensitive Resource Areas identified CERL Study –High encroachment
Marine Mammals/ Marine Resources/ Marine Sanctuaries	No impact	Not applicable.
Noise	No impact. No additional noise generated by these moves.	#239 –No noise contours off installation.

Threatened& Endangered Species/Critical Habitat	5 Threatened Species exist on installation: Golden Checked warbler, Black-capped vireo, Madla's cave meshweaver, Rhadine exilis, Rhadine infernalis. Restrictions preclude noise and smoke within 100 meters of Golden Checked warbler and Black-capped vireo, and 100 meter restrictions around cave openings for Madla's cave meshweaver, Rhadine exilis, and Rhadine infernalis. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or 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 Manageme nt	No impact. Consider need to purchase additional solid waste disposal services due to 8K+ increase in personnel.	#269 –Installation has RCRA Subpart X OB/OD Permit #265- Has RCRA TSD facility. #272 – Not a permitted solid waste disposal facility
Water Resources	Installation is located over or in the recharge zone of sole-source aquifer, which may result in future regulatory limitations on training activities. 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.	#276- Located over recharge zone of sole-source aquifer #278 – Not subject to McCarren Amdmt #293 – Water use restrictions have been reported (2000, 2002) - water conservation #824/825 indicates adequate water avail IREM – potable water infr. can support approx 143,000 more people #279 -Does discharge to imp waterway, but doesn't impair the waterway. #291 –3 on-installation water production plants #297 – 2 on site dom ww treatment plants; 1 off-installation public-owned plant. #282 – No industrial wastewater trmt plant
Wetlands	No impact	#251- Survey completed 9/99. #257 – 1% of installation has restricted wetlands

SUBJECT: SUMMARY OF CUMULATIVE SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED)

SCEI # 25

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Fort Sam Houston
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-New Source Review and Permitting - $100K-$500K -Air Conformity Analysis -$25K-$75K -Develop Programmatic Agreement -$10K - Conduct Tribal gov't-to-gov't consultation -$500-$2K per meeting -Evaluation to determine if arch/tribal site is significant - $15K - $40K per site - Evaluation to determine if historic buildings/structures are significant -$1K-$2K per site -Endangered Species Management - $20K -$2M - Install Best Management Practices (BMPs) to protect impaired waterways and reduce non-point source runoff from training areas and ranges - $100K - $3M -Realignment NEPA at gaining base -$1M (EIS) based on moving pop of >9K personnel
COBRA Costs:	-Air Conformity Analysis -$50K -New Source Review and Permitting - $100K -Realignment NEPA at gaining base -$1M (EIS) based on moving pop of >9K personnel

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #26 **TITLE: SCEI FOR FT SILL**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

E&T-0061v3	**Net Fires Center (Fort Sill)**	**Gain**	
HSA-0018v5	**Consolidate DFAS 24 Central and Field Operating Sites into 3 Sites**		**Loss**
HSA-0135v2	**Regional Correctional Facilities**	**Loss**	
USA-0168v3_2	**USAR C2 Proposal - SOUTHWEST**	**Gain**	
USA-0221v4	**Operational Army (IGPBS)**	**Gain**	
USA-0229v3	**RC Transformation in OK**	**Gain**	

ANALYST _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Ft Sill	Analyst Comments (& data source(s) that drive assessment)
Air Quality	In attainment for all criteria pollutants. No impact.	#212 - No HAPS #213 - In attainment for all criteria pollutants #211 Added emissions for SO2 are close to, but under, the permit limit. #218/ISR No mission impacts
Cultural/Archeological/Tribal Resources	365 historic sites and 337 archeological sites are reported, which currently restrict future construction/training/testing. 8 Native American Tribes assert interest in archeological sites. Due to interest from Native American Tribes, a potential impact may occur as a result of increased time delays and negotiated restrictions. Since there is no Programmatic Agreement in place, potential impacts may occur, since 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, which may lead to increased delays and costs.	#230 - 337 total arch sites, some restrict constr & operations/training/testing #232 - High potential for Archeological sites #231 – Native People's sites present #233 – 60% surveyed #234 - 8 Native tribes assert interest & in formal consultation (Apache Tribe of Oklahoma, Comanche Nation, Cheyenne-Arapahoe Tribes, Ft. Sill Apache Tribes, Kiowa Tribe, Caddo Indian Nation of Oklahoma, Delaware Tribe of Western Oklahoma, Wichita and Affiliated Tribes #235 -365 historic resources listed #236 - No programmatic agreement ISR - Arch site restrictions impact mission
Dre dg-ing	No Impacts	#226, 227, 228 – N/A
Land Use Constraints/Sensit ive Resource Areas	No Impacts. Aircraft training around Ft Sill are restricted by nearby sensitive habitat. Aircraft overflight limited to daytime only and altitude must remain above 2000 over the Wichita Mountain Wildlife Refuge.	#30- Buildable Acres –approximately 320 acres req'd (based on moving ADA School plus a Fires Bde) >800 non-training acres available. #254, #256-Sensitive Resource Areas restrictions reported CERL Study – Moderate Encroachment
M a ri n e M	No Impact	#248, 249, 250, 252, 253 – N/A

Noise	1551 acres of Noise Zone II extend outside of installation boundary. Increased noise may result in operational restrictions on the installation. Further evaluation is required.	#239 - 1551 acres of Noise Zone II extend off installation, which is moderately encroached by development
Threatened& Endangered Species/Critical Habitat	Installation has 1 TES (Black-Capped Vireo) which results in restrictions on training land at high altitudes. 1 candidate species present with minimal current impact on operations. Additional operations may further impact threatened / endangered species leading to additional restrictions on training or operations.	#259 - Black-capped Vireo. Some restrictions on high altitude training (orienteering) #261- Biological opinions for Vireo in place that restrict installation operations and range operation. 262 - No critical habitat #263 - 1 candidate species (Prairie Dog) no restriction for this species. #264 – No proposed critical habitat restrictions ISR2 shows no impact.
Waste Manageme nt	No Impact	#269 - Ft Sill does not have a RCRA Subpart X permit, but not an issue since ADA school is likely not performing waste munitions management and if it is, it is occurring on an active range.
Water Resources	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.	#276 - Not over recharge zone #278 – McCarren Amendment does not apply #293 - 14 days of water controls/restr reported in FY02 IREM indicates water infrastructure has ample surplus #279 Discharges to 2 impaired waterways, but does not impair the waterway which is not a source of potable water. ISR - No impact to mission
W etl an ds	No Impact	#251 – Survey completed in 04/95 #257 - 1.25% wetland restricted acres

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);

SCEI #26

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name:___Ft Sill_____
Environmental Restoration*	None.
Waste Management	None.
Environmental Compliance	-Conduct Tribal govt to govt consultations - $2K-$10K per meeting. -Evaluation to determine if archeological/tribal site(s) are significant - $15,000K - $40,000K depending on size, complexity, and location -Evaluation to determine if historic building is significant - $1K-$2K per building depending on size, complexity and location -Develop Programmatic Agreement - $10K -Endangered Species Management (including monitoring) $20K - $2M. - ESA Consultation (Biological Assessment Prep) – $10K to $100K/2 – 12 months -Realignment NEPA at gaining installation - $400K (EA) -Install BMPs to protect impaired waterways and reduce non-point source runoff from tanning areas. -Noise analysis - $5K-$75K
COBRA Costs:	Realignment NEPA at gaining installation (EA) - $400K Noise analysis - $20K

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) [TABS FINAL]

SCEI #27 **TITLE: SCEI FOR TOBYHANNA AD**

DON-0165Rv4	MCLB Barstow	Gain
IND-0083Bv2	Realign Seal Beach	Gain
IND-0086v2	Realign Lackland - Tobyhanna	Gain
S&S-0043Rv2	Privitize Tires, POL & Gases	Loss
S&S-0051R	4 regional Strategic Distribution Platforms	Loss
USA-0036R	Red River Army Depot, TX	Gain

ANALYST: _____ **LAST UPDATE: 5/09/05**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Tobyhanna AD	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact Expected. Due to non-attainment status, Air Conformity Analysis and modifications to existing permits required.	#213 – In moderate non-attainment for Ozone (EPA website non-attainment for 8-hour ozone) #211 – No exceedances reported #212-No top 5 HAPs exceedances reported #220 – Holds 1 Major Operating Permit (SIC code 9711 - Base Title V Operating Permit) #222 – Emissions Credit Trading program available for NOx and VOCs #218 – No restrictions to operations reported due to air quality requirements
Cultural/Archeological/Tribal Resources	No impact	#233- 100% of installation has been surveyed for cultural resources. #235 – No historic prop identified #230 – No arch resources identified on installation #231 – No Native People sites identified #236 – Programmatic Agreement in place #234 – 1 tribe asserted interest in archaeological sites; rare contact #232 – No areas with high archaeological potential identified.
Dredging	No impact	#226, #227, #228 – N/A
Land Use Constraints/Sensitive Resource Areas	No impact	#30 – 721 BA available - 0 acres required-Existing facilities can absorb proposed activities. #201 - No constraints listed #256 – 5 Sensitive Resource Areas identified but cause no restrictions #254-N/A CERL-minimal encroachment
Marine Mammals/Marine Reso	No impact	#248, #249, #250, #252, #253 - No restrictions

Noise	No impact.	#239 – TYAD has no local off post range facilities.
Threatened& Endangered Species/Critical Habitat	No impact	#259 – No TES listed #260 – No critical habitat identified #261 – No Biological Opinion (answered N/A) #262 – No restrictions exist because of biological opinions. #263, #264 – No candidate species/habitat reported
Waste Management	No impact.	#269 –No RCRA Subpart X OB/OD Permit #265- Has RCRA (TSD) facility. #272 – Not a permitted solid waste disposal facility
Water Resources	No impact	#276 – Installation not located over a sole-source aquifer #278 – McCarren Amend does not apply #293 – No potable water restrictions reported #291 – Installation uses 1 On Military Installation Govt Owned Plant for potable water. IREM indicates remaining capacity for potable water to support addl 113 pers; approximately only 70 added. #279 –Installation does not discharge to impaired waterway #297 – 1 On Military Installation Govt Owned Plant for sewage treatment #282 – 1 Industrial Gov't owned wastewater treatment system located on installation. #822, 824, 825, 826, ISRII – no restrictions reported
Wetlands	No impact	#251- Survey completed 09/97. #257 – Wetlands affect 12.45% of installation but do not restrict operations.

Water Resources	No impact	#276 – Installation not located over a sole-source aquifer #278 – McCarren Amend does not apply #293 – No potable water restrictions reported #291 – Installation uses 1 On Military Installation Govt Owned Plant for potable water. IREM indicates remaining capacity for potable water to support 1,829 pers (scenario adds 365) #279 –Installation does not discharge to impaired waterway #297 – 1 On Military Installation Govt Owned Plant #282 – 1 Industrial Gov't owned wastewater treatment system located on installation. #822, 824, 825, 826, ISRII – no restrictions reported
Wetlands	No impact	#251- Survey completed 09/97 #257 - Wetlands affect 12.45% of installation but do not restrict operations

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED);

SCEI #27

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Tobyhanna AD
Environmental Restoration*	None
Waste Management	None
Environmental Compliance	-Air Conformity Analysis-$25K-$75K (includes no mitigation costs) -Realignment NEPA at gaining base – industrial-$1M (EIS)
COBRA Costs:	-Air Conformity Analysis-$50K -Realignment NEPA-$1M (EIS)

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS **[TABS FINAL]**

SCEI # 38 **TITLE: SCEI ON TOOELE ARMY DEPOT**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

IND-0108_2	**Close Hawthorne Army Depot**	**Gain**
IND-0113v2_2	**Realign Sierra Army Depot**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	*Gaining* Installation Assessment Inst Name: Tooele AD _	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact expected. In attainment for all pollutants. No Air Permits and associated thresholds reported. An Air Permit will likely be necessary to accept new demilitarization mission. Added operations will require New Source Review permitting.	#213 In attainment for all pollutants per State Division of Air Quality web site http//www.air quality.utah.gov/ planning/nonattainment.htm. #211 - No permit/Major Source thresholds reported #214 Not projected to be in non-attainment areas #212 No Top 5 Haz. Pollutants reported #218/ISR No restrictions #220 No Permits (reported N/A)
Cultural/Archeological/Tribal Resources	No Impacts. 2 archeological/sacred sites identified and one site restricts training in 150 acre area. Cultural/archeological/tribal resources currently restrict operations. Additional operations may impact these resources, which may lead to delays and costs.	#229, 231 No cemeteries/native people's sites #233 48% installation surveyed #235 No Historic properties/districts identified #230 2 archeological/sacred burial sites identified and one site restricts training in 150 acre area. #234 Skull Valley Band of Goshute Indians has asserted interest in some archeological resource – contact is rare #236 No programmatic Agreement
Dredg -ing	No Impact	No dredging impacts for this scenario.
Land Use Constraints /Sensitive Resource Areas	No Impact	#30 - 12,360 buildable acres available available #201 No constraints #254, #256 No SRA restrictions CERL Study – Minimal encroachment
Marine Mammals/Marine Resources/ Marine Sanctuaries	No Impact	There are no impacts to marine resources from this proposal.
Noise	No Impact. Low noise generation from new mission and low encroachment.	#239 Installation has 18.7 acres of Noise zone II that extend off the installation boundaries

Threatened& Endangered Species/Critical Habitat	No Impact.	#249 No restrictions #259 No TES #260 No critical habitat #261 No biological opionion #262 No species restrictions #263, 264 No candidate species, no proposed habitat
Waste Manage ment	No Impact	# 269 Gaining installation has a RCRA Part X Permit
Water Resources	No impact.	#276 Installation not over a recharge zone #278 Not subject to McCarren Act #279 Installation does not discharge into impaired waterway #282 No industrial waste water treatment plant #293 No potable water restrictions #297 Installation uses one On Military Installation Govt Owned Plant and one Off Military Installation Publicly Owned Plant for sewage treatment. On Installation Sewage Treatment plant may require upgrade based on reported permitted/maximum daily outflows #291- Installation uses one Off Military Installation Publicly Owned plant and one On Military Installation Govt Owned Plant for potable water. IREM reports infrastructure can support 608 additional personnel
Wetlan ds	No Impact	#251 Wetlands survey completed on 06/01 #257 There are no jurisdictional wetlands on installation.

SUBJECT: SUMMARY OFCUMULATIVE ENVIRONMENTAL IMPACTS (CONTINUED)
SCEI #*38*

IMPACTS OF COSTS

Env Resource Area	Gaining Installation Inst Name: Tooele AD
Environmental Restoration	
Waste Management	
Environmental Compliance	-New Source Review Analysis and Permitting - $100K-$500K -Realignment NEPA at gaining base – industrial- $1M (EIS)
COBRA Costs:	-New Source Review -$100K -Realignment NEPA at gaining base – industrial- $1M (EIS)

SUMMARY OF CUMULATIVE ENVIRONMENTAL IMPACTS (SCEI) **[TABS FINAL]**

SCEI #40 **TITLE: SCEI ON WALTER REED**

GENERAL DESCRIPTION: This cumulative assessment is based on the following scenarios:

DON-0033R	**SUBASE New London**	**Gain**
HSA-0053Rv2	**OSD 4th Est to Fort Belvoir and NNMC**	**Loss**
MED-0002Rv2	**National Capital Region**	**Loss**
MED-0028Rv2	**Create Joint Centers of Excellence for Chem, Bio and Med RDA**	**Gain**

ANALYST: _____ **LAST UPDATE: 5/09/2005**

Env Resource Area	Installation Assessment Inst Name: Walter Reed Medical Center	Analyst Comments (& data source(s) that drive assessment)
Air Quality	Impact Expected at Forrest Glen Annex. WRAMC is currently in Severe Non-Attainment area for Ozone. Added operations will require New Source Review permitting and Air Conformity Analysis.	#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 Major Operating Permit and Synthetic Minor Operating Permit – SIC codes 8062 #218/ISR – No mission impact/No restr.
Cultural/Archeological/Tribal Resources	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. No impact expected at Forrest Glen Annex, due to minimal construction required. At main campus, consultation with SHPO will be required to ensure protection of cultural resources after closure.	#230-N/A #231, #232- N/A #233- 0.1% surveyed #235 - 55 historic properties on 95 acres #234 – N/A #236 – Has Prog. Agreement in place
Dredg-ing	No Impact	#226, 227, 228 – N/A
Land Use Constraints/Sensitive Resource Areas	Possible Impact at Forrest Glen Annex – Demolition of old structure (old laundry facility and UST) may have to occur to allow for construction of hyperbaric chamber and due to historic operations at this location (possible use of dry cleaning solvents) and existence of UST, environmental cleanup costs are possible.	#30 - Buildable Acres - 1 req'd, approx 3.3 acres available total, approx 2.15 acres available at Forest Glenn #201, 254– No restrictions/coordination required. #240 - DERA CTC- $755K #256 – One Sensitive Resource Area – restricts ops on 40% of installation – Public Use Only CERL Encroachment Study –moderate encroachment
Marine Mammals /Marine	No Impact	#248, 249, 250, 252, 253 – N/A

Noise	No Impact.	#239 – No Noise contours extend off-installation
Threatened& Endangered Species/ Critical	No Impact.	#259 –264 No TES/Candidate Species/Critical habitat reported.
Waste Management	No Impact.	#269 - No RCRA Subpart X permit. #265 – No TSD Facility #275 - No permitted solid waste disposal facility
Water Resources	Environmental media contamination issues at the main installation include: Trichloroethylene (TCE), Tetrachloroethylene (PCE), Petroleum Hydrocarbons, and Polychlorinated Biphenyls (PCBs) in groundwater.	#276- Not over sole source aquifer # 278 – Not subject to McCarren Amend #279 – N/A #293 – N/A #824,825 - Adequate water available IREM - no data available on water infrastructure capacity #291-3 public systems for potable water production #297- 3 public systems for sewage treatment
Wetlands	Possible impact at Forrest Glen Annex. Wetlands survey may need to conducted to determine impact, as appropriate.	#251 – No survey reported #258 – No wetlands reported.

SUBJECT: SUMMARY OF SCENARIO ENVIRONMENTAL IMPACTS (CONTINUED); [TABS FINAL]
SCENARIO *40*

IMPACTS OF COSTS

Env Resource Area	Installation **Name: WRAMC**
Environmental Restoration*	DERA CTC- $755K
Waste Management	None
Environmental Compliance	Forrest Glen Annex: -Air Conformity Analysis -$25K-$75K -New Source Review -$100K-$500K -Survey for jurisdictional wetlands - $300K-$5M -Realignment NEPA at gaining base -$1M (EIS) based on increasing population >4000 WRAMC Main Installation Campus: -Asbestos/Lead-based paint removal -$200K-$1M -Access controls/caretaker management -$500K-$1M (annually) -Land Use Controls management/enforcement in perpetuity $50K-$100K (annual) -Environmental Baseline Survey- $300K-$500K
COBRA Costs:	-Air Conformity Analysis -$50K -New Source Review -$100K -EBS + Disposal EIS -$1.3M