

c. An archeological survey has been conducted for 212.42 acres; however, no sites are eligible.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by two wells. The wells have a total pumping capacity of 3.2 MGD and an average daily usage of 0.8 MGD.

b. Wastewater.

Wastewater is disposed of under contract with the City and County of Honolulu. The maximum capacity is 5.0 MGD and average disposal quantity is 1.5 MGD.

c. Solid Wastes.

Solid waste is disposed of under a \$352,000 contract with the Honolulu Disposal Company. Average daily volume is 24 tons/day at a cost of \$54/ton.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are: emergency generators, water heaters and vehicular traffic.

d. The installation has no air emission credits.

e. No major projects have been identified as necessary to meet/maintain air quality standards.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites.

The installation has identified 20 Defense Environmental Restoration Account (DERA) eligible contaminated sites.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey is 95% complete.

d. Underground Storage Tanks (UST).

There are 14 active and 16 inactive USTs. Ten have been tested, one failed, and two were replaced/repared.

e. Radioactive Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 800,000	\$ 2,170,000
FY 95	\$ 950,000	\$ 2,701,000
FY 96	\$1,250,000	\$ 1,950,000
FY 97	\$1,500,000	\$ 1,150,000
FY 98	\$1,750,000	\$ 1,150,000
FY 99	<u>\$2,000,000</u>	<u>\$ 1,650,000</u>
	\$8,250,000	\$10,771,000

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 1,086,000	\$ 700,000
FY 95	\$ 0	\$2,635,000
FY 96	\$ 0	\$ 698,000
FY 97	\$ 0	\$ 0
FY 98	\$ 0	\$ 0
FY 99	\$ 0	\$ 0
	<u>\$ 1,086,000</u>	<u>\$4,033,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Dillingham Military Reservation-15032

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	664
(2)	Cantonment area	107
(3)	Maneuver area	550
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	

Landfill 7

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys have been conducted by the Environmental Impact Study Corporation and no Federal or State listed endangered or threatened species or critical habitats have been found on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan/Historic Preservation Plan do not exist for the installation. Comments have been obtained from the State Historic Preservation Officer/Advisory Council for Historic Preservation for undertakings concerning historic properties.

b. A Historic Building Survey has been conducted. No building were recommended for listing on the National Register of Historic Places.

c. Archeological surveys have been conducted on 64.22 acres. No potentially eligible sites were identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

There are no water sources available.

b. Wastewater.

A septic tank is in place, with a maximum capacity of 2,000 gal. Life expectancy is 20 years. Hawaii-on-Call Services provide additional wastewater service for \$15,000/year.

c. Solid Wastes.

Solid waste disposal is by an as required contract.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are vehicle and aircraft traffic.

d. The installation maintains is air emissions credits.

e. No air compliance projects are identified.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

This installation is not a Resource Conservation and Recovery Act (RCRA) permitted treatment, storage or disposal facility.

b. Contaminated Sites.

An assessment has been made by the Army Environmental Hygiene Agency (AEHA). There is one questionable Defense Environmental Restoration Account (DERA) eligible site (further testing required).

c. PCB, Asbestos, Lead Paint, or RADON Issues.

Installation PCB survey is 95% complete.

d. Underground Storage Tanks (UST).

The installation has 11 inactive underground storage tanks, none of which have been tested.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs (\$000):

	<u>FUNDED</u>	<u>UNFUNDED</u>
FY 94	\$ 0	\$ 50
FY 95	0	0
FY 96	0	0
FY 97	0	0
FY 98	0	0
FY 99	0	0
	<u>\$ 0</u>	<u>\$ 50</u>

b. Summary of environmental restoration costs (\$000):

	<u>FUNDED</u>	<u>UNFUNDED</u>
FY 94	\$ 52	\$ 185
FY 95	0	25
FY 96	0	0
FY 97	0	0
FY 98	0	0
FY 99	0	0
	<u>\$ 52</u>	<u>\$ 210</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCIA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Helemano Military Reservation-15115

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	285
(2)	Cantonment area	285
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys have been conducted and no Federal or State listed endangered or threatened species or critical habitats occur on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan and Historic Preservation Plan does not exist for the installation. Comments have been received from the State Historic Preservation Officer/Advisory Council for Historic Preservation.

b. A Historic Building Survey has been conducted and no buildings were found to be eligible for the National Register.

c. Archeological surveys have been conducted on 282.01 acres. No potentially eligible archeological sites were identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by the Schofield Barracks Water System.

b. Wastewater.

Wastewater service is supplied by the Schofield Barracks Wastewater Treatment Plant.

c. Solid Wastes.

Solid waste disposal is by contract with The Refuse with a daily volume of 6 tons/day, at a cost of \$54.00/ton.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are vehicle and aircraft traffic.

d. The installation has no air emission credits.

e. No major air compliance projects were reported.

f. There are no critical air quality regions within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Helemano does not hold any Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites.

There are four Defense Environmental Restoration Account (DERA) eligible sites identified.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB survey is 95% complete.

d. Underground Storage Tanks (UST).

The installation has three active and four inactive underground storage tanks. Four tanks have been tested, one failed and one was replaced.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. No environmental compliance costs were reported.

b. Total Environmental restoration costs are \$1,000,000.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Kahuku Training Area-15225

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	9,380
(2)	Cantonment area	0
(3)	Maneuver area	6,152
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	
	Forest Area	3,228

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A Threatened or endangered species survey is currently in progress by the Nature Conservancy.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan and Historic Preservation Plan do not exist for the installation. Comments are received as appropriate from the State Historic Preservation Officer and Advisory Council for Historic Preservation.

b. A Historic Building Survey has been conducted. No buildings were found to be eligible.

c. Archeological surveys have been conducted on 1,044.81 acres. One site has been identified as potentially eligible for the Natural Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by one well. Total pumping capacity is 0.2 MGD, with an average daily use of 3.3 gallons a day.

b. Wastewater.

Wastewater service is provided entirely by portable latrines. A collection contract is in place with Hawaii On-Call Service for approximately \$36,000.

c. Solid Wastes.

Solid waste disposal is by contract with KPM Equipment, with an annual cost of \$10,000. Daily volume is 0.4 tons/day at a cost of \$54/ton.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are vehicle traffic.

d. The installation has no air emission credits.

e. No major air compliance projects were identified.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) permitted treatment, storage or disposal facility.

b. Contaminated Sites.

The installation has identified one Defense

Environmental Restoration Account (DERA) eligible site.

- c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB survey is 95% complete. No further data provided.

- d. Underground Storage Tanks (UST).

The installation has one inactive underground storage tank that has not been tested.

- e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) or DA licenses reported for radiological materials and sources

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

- a. No environmental compliance costs were reported.

- b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY94	\$ 0	\$280,000
FY96	\$ 0	\$ 25,000
FY97	\$ 0	\$ 0
FY98	\$ 0	\$807,000
FY99	\$ 0	\$ 0
	\$ 0	\$1,112,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Kawaihae Military Reservation-15295

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	11
(2)	Cantonment area	11
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys have been conducted and no Federal or State listed endangered or threatened species or critical habitats have been found on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan/Historic Preservation Plan does not exist for the installation. Comments are obtained as applicable from the State Historic Preservation Officer/Advisory Council for Historic Preservation.

b. A Historic Building Survey has not been conducted.

c. Archeological surveys have been conducted on 6.53 acres. No sites were found eligible for the National Register for Historic Places.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

There are no potable water sources on the installation.

b. Wastewater.

Portable latrines are used on the installation.

c. Solid Wastes.

Solid waste disposal is by contract with Wall's Rubbish Service for \$3,600 a year. Daily volume is 1 ton/day.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are vehicles and ships.

d. The installation has no air emission credits.

e. No major air compliance projects were reported.

f. Volcano National Park; Haleakala National Park are within 100 km.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation does not hold any Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites.

An assessment to determine contamination has been conducted and there are no Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB survey is 95% complete. No further information provided

d. Underground Storage Tanks (UST).

The installation has no underground storage tanks.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. No environmental compliance costs are reported.

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY94	\$ 0	\$ 30,000
FY96	\$ 0	\$ 0
FY97	\$ 0	\$ 0
FY98	\$ 0	\$ 0
FY99	\$ 0	\$ 0
	<u>\$ 0</u>	<u>\$ 30,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Kawailoa Training Area-15325

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	23,348
(2)	Cantonment area	0
(3)	Maneuver area	2,049
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	Unknown
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Forest Area	21,299

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys have been conducted and no Federal or State listed endangered or threatened species or critical habitats have been found on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan/Historic Preservation Plan does not exist for the installation.

b. A Historic Building Survey has not been conducted.

c. Archeological surveys have been conducted on 523.64 acres. No potentially eligible sites for the Natural Register were identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is not available.

b. Wastewater.

Portable latrines are used on the installation.

c. Solid Wastes.

No information provided.

5. AIR QUALITY.

a. The air quality region is in Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution source is vehicle traffic.

d. The installation has no air emission credits.

e. No major air compliance projects were reported.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation holds no Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites.

An assessment to determine contamination has not been conducted.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB Survey is 95% complete. No further information provided.

d. Underground Storage Tanks (UST).

The installation has no underground storage tanks.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. No environmental compliance costs were reported.

b. No environmental restoration costs were reported.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Makua Military Reservation-15545

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	4,191
(2)	Cantonment area	0
(3)	Maneuver area	1,034
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	1,944
(6)	Non-Impact Firing Range	1,212
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys have been conducted and no Federal or State listed endangered or threatened species or critical habitats have been found to occur on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan/Historic Preservation Plan does not exist for the installation. Comments are obtained as appropriate from the State Historic Preservation Officer (SHPO) or Advisory Council for Historic Preservation (ACHP).

b. A Historic Building Survey has been conducted. No buildings were found to be eligible for listing on the National Register.

c. Archeological surveys have been conducted on 1,316.51 acres. One potentially eligible site was identified for listing on the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract by the City of Honolulu Board of Water Supply. The average daily use is .008 MGD.

b. Wastewater.

Wastewater facility has a maximum design capacity of 40,000 gallons /month. Life expectancy is 20 years; however, the facility will require larger holding tanks.

c. Solid Wastes.

Solid waste disposal is by a \$10,000 contract with KPM Equipment, at a cost of \$54/ton. Daily volume is 0.4 tons/day.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are accidental and controlled range fires.

d. The installation has no air emission credits.

e. No major air compliance projects are reported.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is in the process of obtaining a (RCRA) subpart II permit for open burning/open detonation (OB/OD).

b. Contaminated Sites.

An assessment to determine contamination has been conducted and no Defense Environmental Restoration Account (DERA) eligible sites have been identified.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB Survey is 95% complete. No further information provided.

d. Underground Storage Tanks (UST).

The installation has no underground storage tanks.

e. Radiological Materials and Sources.

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 300,000	\$ 0
FY 95	\$ 500,000	\$ 125,000
FY 96	\$ 150,000	\$ 50,000
FY 97	\$ 250,000	\$ 50,000
FY 98	\$ 150,000	\$ 50,000
FY 99	\$ 250,000	\$ 50,000
	<u>\$1,600,000</u>	<u>\$ 325,000</u>

a. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 0	\$ 150,000
FY 95	\$ 0	\$ 0
FY 96	\$ 0	\$ 0
FY 97	\$ 0	\$ 0
FY 98	\$ 0	\$ 0
FY 99	\$ 0	\$ 0
	<u>\$ 0</u>	<u>\$ 150,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Pohakuloa Training Area-15705

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	108,792
(2)	Cantonment area	566
(3)	Maneuver area	29,115
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	27,752
(5)	Firing Ranges	51,000
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has been conducted by the Colorado State University. There are unspecified Federal or State listed endangered or threatened species (TES) or critical habitats found to occur on the installation. Biological assessment for the Multi-purpose Range Complex is currently being reviewed at DA. Some restrictions have been placed on one range pending U.S. Fish and Wildlife Service (USFWS) Biological Opinion. The unspecified plant TES population is increasing.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan and Historic Preservation Plan does not exist for the installation. Comments, as appropriate, are obtained from the State Historic preservation Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP).

b. A historic building survey has been conducted. No buildings are eligible for the National Register.

c. Archeological surveys have been conducted on 2,993.64 acres. One potentially eligible site for the National Register was identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract with Hawaii County, at an annual cost of \$16,000, and an average daily usage of 0.018 MGD.

b. Wastewater.

Wastewater is contracted through Fair Contracting for 60-80 chemical latrines.

c. Solid Wastes.

Solid waste disposal is by contract with Wally's Rubbish at a cost of \$25,000 for four months. Average daily volume is 5 tons.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are range fires, airfield operations, traffic on dirt roads.

d. No major air compliance projects are reported.

e. The installation has no air emission credits.

f. Hawaii Volcanoes National Park and Haleakala National Park are critical air quality regions within 100 kilometers.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) storage or disposal facility.

b. Contaminated Sites.

The installation has identified four Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

All three PCB contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

The installation has 13 active and 1 inactive underground storage tanks, 12 have been tested, none failed, and none were replaced.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials and/or sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs (\$000):

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 0	\$ 2,116
FY 95	250	2,151
FY 96	100	1,746
FY 97	0	1,560
FY 98	0	1,260
FY 99	0	1,260
	<u>\$ 250</u>	<u>\$ 10,093</u>

b. Summary of environmental restoration costs (\$000):

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 38	\$ 220
FY 95	0	660
FY 96	0	0
FY 97	0	0
FY 98	0	0
FY 99	0	0
	<u>\$ 38</u>	<u>\$ 880</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Wheeler Army Airfield

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	1,390
(2)	Cantonment area	0
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	22
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species survey is in progress. No Federal or State listed endangered or threatened species or critical habitats are expected to be found on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan or Historic Preservation Plan has not been prepared for the installation.

b. A Historic Building Survey has been conducted. Fifteen structures were determined to be eligible for or listed on the National Register of Historic Places.

c. Archeological surveys have been conducted on all 1,390 acres. No potentially eligible sites were identified.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied entirely by groundwater from the Schofield Barracks Water System.

b. Wastewater.

Wastewater service is supplied through the Schofield Barracks Wastewater Treatment Plant.

c. Solid Wastes.

Solid waste disposal is by contract with The Refuse, with a total contract amount of \$453,000. Daily volume of 19 tons/day at a cost of \$54/ton.

5. AIR QUALITY.

a. The air quality region is Region #60, State of Hawaii.

b. The region is in attainment.

c. Air pollution sources are traffic, water heaters, and airfield operations.

d. The installation maintains no air emission credits.

e. There are no major projects reported to meet/maintain air compliance.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) permitted treatment, storage or disposal facility.

b. Contaminated Sites.

There are 20 Defense Environmental Restoration Account (DERA) eligible sites identified.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

PCB survey is 95% complete.

d. Underground Storage Tanks (UST).

The installation has 28 active and 46 inactive underground storage tanks. A total of 23 have been tested, six failed, and none were replaced.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials at Wheeler AAF.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>FUNDED</u>	<u>UNFUNDED</u>
FY 94	\$100,000	\$300,000
FY 95	\$100,000	\$300,000
FY 96	\$100,000	\$300,000
FY 97	\$100,000	\$175,000
FY 98	\$100,000	\$ 0
FY 99	\$ 0	\$ 0
	<u>\$500,000</u>	<u>\$1,075,000</u>

b. Summary of environmental restoration costs:

	<u>FUNDED</u>	<u>UNFUNDED</u>
FY 94	\$250,000	\$ 864,000
FY 95	\$ 0	\$2,000,000
FY 96	\$ 0	\$ 0
FY 97	\$ 0	\$ 0
FY 98	\$ 0	\$ 0
FY 99	\$ 0	\$ 0
	<u>\$250,000</u>	<u>\$2,864,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Totten -- 36790

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	136.83
(2)	Cantonment area	122.82
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	14.01
	Duck Pond	2.61
	Old Fort Totten	11.4

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or National Air Space Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species surveys have been conducted and no Federal or State listed endangered or threatened species or critical habitats have been found to occur on the installation.

3. CULTURAL RESOURCES.

a. A Cultural Resources Management Plan (CRMP) and Historic Preservation Plan exist for the installation. The CRMP has been reviewed by the State Historic Preservation Officer (SHPO).

b. A Historic Building Survey has been conducted. One building is on the National Register. There are two sites eligible for listing; one site contains four buildings, and

the other has an unknown number of batteries and vaults and one building. In addition, there are 62 buildings and structures in a potentially eligible historic district, which is in the nomination process. The historic district is approximately two-thirds of the installation. The majority of structures date to the 1885-1914 era. All of the eligible and listed structures are in substandard condition. The estimated renovation cost for the eligible and listed buildings is \$4,000,000 and potentially eligible is \$6,000,000.

c. Archeological surveys have been conducted on 97.21 acres. No potentially eligible sites were identified, however seven areas were determined to be of medium to high resource preservation potential. There is storage or curation of archeological artifacts and associated records on Fort Totten. It is recommended that further archeological inventories/studies be conducted in areas of medium high resource preservation potential prior to major construction or excavation.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied under contract by the City of New York. The maximum capacity is 0.15 MGD and average daily use is 0.023 MGD.

b. Wastewater.

Wastewater is contracted through the City of New York. Plant design is 1.368 MGD and daily use is an average of approximately 0.024 MGD.

c. Solid Wastes.

Solid waste disposal is by contract with the City of New York with a contract value of \$74,400. The average disposal rate is 24 CY/day at a cost of \$85.52/ton.

5. AIR QUALITY.

a. The air quality region is in the New York City Air Quality Region.

b. The region is classified as non-attainment for ozone (severe) and carbon monoxide (moderate).

c. Air pollution sources are traffic, heating sources, and minor sources of VOCs.

d. The installation has no air emission credits.

e. Major projects identified to meet/maintain compliance are studies/permit fees and asbestos abatement.

f. Fort Totten is within a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort Totten is not Resource Conservation and Recovery Act (RCRA) permitted treatment, storage or disposal facility.

b. Contaminated Sites.

There is one Defense Environmental Restoration Account (DERA) eligible site identified. In addition, there is a PA/PI is underway to determine if there is any contamination at three suspected sites.

c. PCB, Asbestos, Lead Paint, or RADON Issues.

All three PCB contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

The installation has 23 underground storage tanks, 11 have been tested, two failed, and two were replaced.

e. Radiological Materials and Sources

There are no Nuclear Regulatory Commission (NRC) nor DA licenses reported for radiological materials and sources at Fort Totten.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 936,000	\$ 665,000
FY 95	\$ 0	\$1,471,000
FY 96	\$ 0	\$1,473,000
FY 97	\$ 0	\$1,310,000
FY 98	\$ 0	\$1,200,000
FY 99	<u>\$ 0</u>	<u>\$ 548,000</u>
	\$ 936,000	\$6,667,000

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 177,000	\$ 30,000
FY 95	\$ 0	\$ 500,000
FY 96	\$ 0	\$ 500,000
FY 97	\$ 0	\$ 100,000
FY 98	\$ 0	\$ 100,000
FY 99	<u>\$ 0</u>	<u>\$ 100,000</u>
	\$ 177,000	\$1,230,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

TACOM Support Activity, Selfridge --

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	622.69
(2)	Cantonment area	0
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	67.7
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Tucker Creek	10

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted. No TES are known to occur on the installation.

3. CULTURAL RESOURCES.

a. No Historic Preservation Plan/Cultural Resources Management Plan has been completed, nor have comments been obtained from the State Historic Preservation Officer (SHPO) or the Advisory Council for Historic Preservation (ACHP).

b. A historic building survey has not been conducted for the installation and no structures are known to be eligible for listing on the National Register of Historic Places.

c. An archeological survey has not been conducted, however the installation reports the presence of 86 potentially eligible archeological sites.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by a contract with the City of Mt. Clemmons, MI. The maximum capacity is 1.5 MGD and average daily usage is 0.4 MGD. There are no restrictions to expansion of capacity.

b. Wastewater.

Wastewater treatment is provided by contract with Harrison Township. The maximum capacity is 0.629 MGD and an average daily usage of 0.44 MGD. There are no restrictions to expansion of capacity.

c. Solid Wastes.

Solid waste disposal is provided under a \$183,870/year contract with Efficient Sanitation. The average disposal rate is 18.3 tons/day at a cost of \$27.56/ton.

5. AIR QUALITY.

a. The air quality region is Southeastern Michigan, Environmental Protection Agency (EPA) Region V and Michigan Department of National Resources, Livonia District.

b. The region is in non-attainment for Ozone (moderate).

c. The installation reports no on-post air pollution sources.

d. The installation has no air emission credits.

e. No major air compliance projects/expenditures are indicated.

f. There are no critical air quality regions reported within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites.

An assessment to determine contamination has been conducted, and one Defense Environmental Restoration Account (DERA) eligible contaminated site was identified.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey is complete and 26 contaminated transformers have been identified. Six contaminated transformers have been replaced and five drained and refilled.

d. Underground Storage Tanks (UST).

Out of five active UST's, three have been tested and all passed.

e. Radioactive Materials and Sources.

The installation does not hold a Nuclear Regulatory Commission (NRC) or DA license for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs reported.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Environmental compliance costs are not provided.

b. Environmental restoration costs are not provided.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Benning -- 13025

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	181,400
(2)	Cantonment area	6,698
(3)	Maneuver area	114,750
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	5,092
	Land reclamation	740
	TES Sites	4,352
(5)	Firing Ranges	41,110
(6)	Non-Impact Firing Range	8,347
(7)	Wetlands Sec 404 area Est.	22,100
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	5,403
	Contaminated sites	4
	Landfills	250
	Surface water areas	874
	Open space	4,275

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zone II (off post)	2,965

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted, however the following Federal and State TES are reported as occurring on the installation: Endangered animals - *Picoides Borealis* (Federal, Georgia, & Alabama). Threatened animals - American Alligator (Federal & Georgia), Gopher Tortoise (Federal, Georgia, and Alabama), *Cyprinella Callitaenia* (Georgia), *Rana Areolata Sevosa* (Alabama) and Bald Eagle (Federal & Georgia). Endangered floral/plants - *Trillium Reliquum* (Federal & Georgia); and Threatened floral and plants - *Croomia Pauciflora* (Georgia & Alabama), *Agrimonia Incisa* (Alabama), and *Brickellia Cordiflora*

(Alabama).

3. CULTURAL RESOURCES.

a. The installation has a Historic Preservation Plan or Cultural Resources Management Plan, but has not been coordinated with the State Historic Preservation Officer (SHPO) nor the Advisory Council on Historic Preservation (ACHP).

b. A historic building inventory has been completed for Fort Benning and approximately 551 installation buildings are reported to be listed or potentially eligible for the National Register of Historic Places. One building is reported to be in substandard condition.

c. Approximately 25% (45,500 acres) have been surveyed for archeological resources. Approximately 386 of the archeological sites located by these surveys are potentially eligible for the National Register. In addition, there is currently curation or storage of archeological artifacts and associated records at the installation.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Ninety-nine percent of the potable water is supplied from surface water and one percent from nine wells. The design capacity of the surface water treatment plant is 18 MGD with an average use of 8.0 MGD. The nine wells have a total pumping capacity of 4.0 MGD and about 0.003 MGD are used. The system is 39 yr. old and modernization is required to meet Environmental Protection Agency (EPA) standards.

b. Wastewater.

There are two National Pollutant Discharge Elimination System (NPDES) permitted waste water treatment plants. Plant #1 has a design capacity of 4.6 MGD and an average daily usage of 2.37 MGD. Plant #2 has a design capacity of 3.8 MGD and an average daily usage of 1.94 MGD. Upgrades are needed to meet EPA standards and prevent potential bypasses/discharges.

c. Solid Wastes.

The installation's 25 acre landfill has a total remaining capacity of 96,000 tons and an estimated life expectancy of two years.

Solid waste disposal is also provided by a \$1,064,711 contract with Mark Dunning Ind., Inc. Average daily volume is 280 tons/day at a cost of \$30.00/ton.

5. AIR QUALITY.

- a. The installation is in Region I, Columbus, Georgia and Phoenix City, Alabama.
- b. The region is in attainment.
- c. Air pollution sources are: steam plants, one incinerator, vehicle traffic, accidental fires and underground fuel storage tanks.
- d. The installation has no air emission credits.
- e. The installation has identified major air compliance projects.
- f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

- a. Use of hazardous materials.

There is a Resource Conservation and Recovery Act (RCRA) Part B permitted hazardous waste storage site at the DRMO. In addition, the installation is in the process of obtaining a RCRA Part B Subpart X permit for groundwater monitoring. The permit is expected to be issued in September 1995.

- b. Contaminated sites.

There are 12 known Defense Environmental Restoration Account (DERA) contaminated sites, 11 DERA eligible contaminated sites, and six sites requiring monitoring.

- c. PCB, Asbestos, Lead Paint, and RADON issues.

No PCB survey has been conducted.

There is an ongoing Lead Based Paint abatement program for 3,608 Family Housing units. Debris are considered hazardous or potentially hazardous waste. The cost estimate for the first 493 units (Buildings listed on the National Register of Historic Places) is \$4,005,000.

d. Underground Storage Tanks (UST) .

Out of 94 active and 37 abandoned USTs, 92 have been tested, 12 were replaced and six repaired. One piping system failed testing within the last year.

e. Radioactive materials and Sources.

The medical activity holds Nuclear Regulatory Commission (NRC) and DA authorizations to use any bi-product listed under 10 CFR 35-100, 10 CFR.200 and 10 CFR 31.11 in the frame of the Nuclear Medicine Department's mission (i.e. Imaging). Currently the Nuclear Medicine Department operates a group of four rooms plus one detached room in the basement of building 9200, which require routine survey.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	<u>Hunting/Fishing</u>	<u>Forestry</u>
FY 92	\$ 44,294	\$512,000
FY 93	\$ 39,372	\$765,000
FY 94	\$ 38,000	\$803,000
	<u>\$121,566</u>	<u>\$2,089,000</u>

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$7,807,000	\$21,214,000
FY 95	\$ 0	\$36,241,000
FY 96	\$ 0	\$28,420,000
FY 97	\$ 0	\$17,949,000
FY 98	\$ 0	\$14,541,000
FY 99	\$ 0	\$9,718,000
	<u>\$7,807,000</u>	<u>\$128,083,000</u>

b. Summary of restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$14,725,000	\$ 0
FY 95	\$ 0	\$11,029,000
FY 96	\$ 0	\$5,425,000
FY 97	\$ 0	\$3,130,000
FY 98	\$ 0	\$1,965,000
FY 99	\$ 0	\$ 442,000
	\$14,725,000	\$21,991,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands



NONSTRUCTURAL ATTRIBUTES

Fort Bliss -- 48125

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	1,119,471
(2)	Cantonment area	10,644
(3)	Maneuver area	915,455
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	Unknown
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	Est. 120
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	770,889
	Impact Area Sites	770,762
	Landfill	106
	Contaminated sites	21

b. Air Space.

- (1) Restricted Air Space. 1,554 sq. miles
- (2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

Threatened or endangered species (TES) surveys have been conducted. The following Federal and State listed species are reported to occur on Fort Bliss: Endangered animals - Peregrin Falcon (Federal, Texas, & New Mexico), Southwestern Willow Flycatcher (New Mexico), Bird's Sparrow (New Mexico), Organ Mountains Colorado Chipmunk (New Mexico), Bell's Vireo (New Mexico), Gray Vireo (New Mexico), Varied Bunting (New Mexico), and Common Ground Dove (New Mexico); threatened animals - Bald Eagle (Federal, Texas, & New Mexico), Mexican Spotted Owl (Federal), and Texas Horned Lizard (Texas); and endangered plants/flora - Seed's Pincushion Cactus (Federal, Texas, & New Mexico), Lloyd's Hedgehog Cactus (Federal, Texas, & New Mexico), Alamo Beard Tongue (New Mexico), Desert Night-blooming Cereus (New Mexico), Grama Gras Cactus (New Mexico), Nodding Cliff Daisy (New Mexico), Organ Mountains Evening Primrose (New Mexico), Sand Prickly Pear

(New Mexico), Organ Mountain Pincushion Cactus (New Mexico), and Scheer's Pincushion Cactus (New Mexico). The Southwestern Willow Flycatcher (New Mexico) is also a Federal candidate species. In addition, Fort Bliss is considered a habitat for the endangered species (Federal, Texas, and New Mexico) Northern Aplomado Falcon, since the species is reported to occur north and south of the installation. There is no biological opinion for all Federal and State TES for all missions on the installation, but surveys have been done on an exercise specific basis. Completion of all surveys is pending. Informal consultations with the U.S. Fish and Wildlife Service (USFWS) will continue until baseline surveys are completed in 1995 for listed species. There are no constraints to operations and development due to TES reported, since most training occurs away from known TES locations.

3. CULTURAL RESOURCES.

a. Fort Bliss has a Historic Preservation Plan/Cultural Resources Management Plan being revised, which has been reviewed by the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP).

b. A historic building survey is currently in progress. One building is listed on the National Register of Historic Places and 233 buildings are eligible.

c. Partial archeological survey(s) have been conducted on 350,000 acres and a total of 11,778 potentially eligible sites have been recorded. Thirty-one sites are reported to be listed on the National Register. Fort Bliss also currently stores and curates archeological artifacts and associated records collected on the installation. Cultural resource limitations have set aside 11,904 acres as off-limits.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied entirely by wells. The total pumping capacity of the 18 installation wells (Texas - 15 & New Mexico - 3) is 13.0 MGD, with an average use of 3.56 MGD. Consumption directly attributed to well pumping has impacted the aquifer with drawdowns of approximately 2 feet/year.

It is estimated that effective management of the area water demands and supplies over the planning period can accommodate a doubling of population in El Paso County.

b. Wastewater.

Approximately 99% of wastewater is disposed of under contract with the City of El Paso. The historical peak load for Fort Bliss is reported to be 5.36 MGD, however 6.0 MGD is possible with some surcharge of the trunk sewers. The average daily usage for 1993 was 1.49 MGD. Additional waste water treatment is provided by septic tanks and four remote evaporation lagoons.

c. Solid Wastes.

Solid waste disposal is also carried out under a \$909,416 contract with Moore Services, Inc, who manages the installation owned 106 acre landfill. The average daily volume is 75 tons/day at a cost of \$38.86/ton. The landfill's remaining capacity is 210,692 tons. The useful remaining life of the landfill is eight years for putrescible wastes and four years for rubble waste.

5. AIR QUALITY.

a. The installation is in Environmental Protection Agency (EPA) Air Quality Region VI.

b. The region is not in attainment for ozone (serious), particulate (moderate), and carbon monoxide (moderate).

c. The air pollution sources are: heat/steam energy production, generators, underground storage tanks, above ground tanks, decreasing operations, painting operations, miscellaneous surface coating/solvent usage, pesticide/herbicide usage, ethylene oxide sterilizers, abrasive blasting, woodworking operations, landfill, incinerators, engine testing, aircraft landings and takeoffs, off-road mobile sources, welding operations, miscellaneous chemical sources, asphalt operations and accidental fires.

d. The installation does not maintain air emission credits.

e. The installation has identified major projects to meet/maintain air quality compliance.

f. Critical air quality regions within 100 km of the installation are the Lincoln National Forest, White Sands National Monument, Elephant Butte and Caballo Reservoirs.

g. The only limitation to an installation activity set by air program oversees is the number of hours and megawatt output Fort Bliss's electrical peak shaving plant can operate.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit to store hazardous waste at building 11614 for up to one year. The permit is effective for 10 years beginning 17 January 1991. In addition, the installation has one 90-day storage unit, which is located at Raytheon (tenant site). Fort Bliss is also in the process of obtaining a RCRA Part B Subpart X permit for open burning/open detonation for an existing facility. Issuance is expected in July 1994.

b. Contaminated sites.

Twenty-one Defense Environmental Restoration Account (DERA) eligible sites are currently being studied or are proposed for site investigation.

c. PCB, Asbestos, Lead Paint, and RADON issues.

A PCB survey is currently underway, however no contaminated transformers have been identified. All transformers identified in a previous survey have been replaced.

The State of Texas is currently in the process of filing a lawsuit for civil penalties and injunctive relief for 10 asbestos violations dating back to December 1981. The installation is negotiating a compliance agreement to include the hiring of an Asbestos Programmer.

Priority one buildings have been surveyed for Radon. One building was found to be marginally above the threshold, however no corrective active was taken due to its marginal level (5.2 pci/l).

A program is in place to determine occurrences of lead based paint and remediation procedures.

d. Underground Storage Tanks (UST).

A total of 206 regulated tanks were tested, of which 20 failed. Initiatives to correct failures are in progress and currently eight tanks have been repaired.

e. Radioactive Materials and Sources.

The installation does not hold any Nuclear Regulatory Commission (NRC) nor Da licenses for radioactive materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	<u>Recycling (DPCA)</u>	<u>Recycled Waste (DRMO)</u>
FY 92	\$135,000	\$139,000
FY 93	\$151,000	\$167,000
FY 94	<u>\$ 96,000</u>	<u>\$ 92,000</u>
	\$382,000	\$398,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$16,517,000	\$12,740,000
FY 95	\$ 0	\$50,032,000
FY 96	\$ 0	\$37,220,000
FY 97	\$ 0	\$26,353,000
FY 98	\$ 0	\$28,732,000
FY 99	<u>\$ 0</u>	<u>\$12,948,000</u>
	\$16,157,000	\$168,025,000

b. Summary of restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$3,692,000	\$ 420,000
FY 95	\$ 0	\$7,465,000
FY 96	\$ 0	\$6,529,000
FY 97	\$ 0	\$4,227,000
FY 98	\$ 0	\$3,326,000
FY 99	<u>\$ -</u>	<u>\$ -</u>
	\$3,692,000	\$21,967,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Eustis -- 51215

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	8,228
(2)	Cantonment area	2,814
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	1,821
(5)	Firing Ranges	1,264
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area (Study in progress)	2,329
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

- | | | |
|-----|--|---|
| (1) | Restricted Air Space. (Whole post) | 0 |
| (2) | Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Unknown ICUZ study dates to 1986 and ICUZ Zone II cannot be documented from this report. A new study is scheduled for Summer 94. | |

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A Floral (plant) threatened or endangered species (TES) survey was completed in March 1994. A Faunal (animal) TES survey will begin in FY 95. One Federally listed threatened species, Bald Eagle, and one endangered species, Peregrine Falcon, occur on the installation.

3. CULTURAL RESOURCES.

a. No historic preservation plan has been completed for this installation, nor has a memorandum of agreement concerning cultural resources been signed for Fort Eustis.

b. A historical survey is in progress (17% complete) with one building, Matthew Jones House, potentially eligible for the National Register of Historic Places.

c. Archeological surveys have been conducted for all 8,228 acres with 214 potentially eligible sites identified. Limitations to development and operations include avoidance of known sites. Phase II work is required if site cannot be avoided.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied from surface water sources and is purchased from the City of Newport News. The design capacity is 9.94 MGD and Fort Eustis's usage rate is 1.7 MGD. There are no known restrictions to expansion of capacity. There is one well used as backup source on Fort Eustis. Though it has not been used, it is reported to have a pumping capacity of 1.8 MGD and excess capacity of 0.1 MGD.

b. Wastewater.

A wastewater treatment plant exists with a design capacity of 3.0 MGD and an average use of 1.7 MGD. Life expectancy is not known. The National Pollutant Discharge Elimination System (NPDES) permit is presently under review.

c. Solid Wastes.

Solid waste disposal is accomplished under a \$630,455 contract. Approximately 36.28 tons/day are disposed of at a cost of \$43.88/ton. There are no known limitations to increasing the contract quantity. Three inactive landfills are on the base.

5. AIR QUALITY.

a. The installation is in Environmental Protection Agency (EPA) Air Quality Region VI.

b. The region is in non-attainment for ozone.

c. Pollution sources are: vehicle painting operations, diesel powered generators, steam boilers, hospital incinerator, vehicle training, aircraft and watercraft training. Activities restricted are use of oil burning and dual fire boilers. Natural gas use must be set within limits.

- d. The installation has no air emission credits.
- e. Major projects have been identified to meet/maintain air compliance.
- f. Fort Eustis is within 100 km of a critical air quality region, Richmond, VA.

6. HAZARDOUS MATERIALS/SITES.

- a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) permitted treatment, storage or disposal facility.

- b. Contaminated sites.

There are 22 Defense Environmental Restoration Account (DERA) eligible sites.

Fort Eustis was proposed for the National Priority List (NPL) in January 1994.

- c. PCB, Asbestos, Lead Paint, and RADON issues.

All 17 PCB contaminated transformers have been replaced.

Majority of WWII structures contain asbestos.

- d. Underground Storage Tanks (UST).

Forty-five out of 226 USTs (219 active & 7 abandoned) have been tested. Three failed and one was replaced/repared.

- e. Radioactive Materials and Sources.

There are no known radioactive materials requiring Nuclear Regulatory Commission (NRC) or DA licenses on Fort Eustis.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	<u>Forestry</u>	<u>Hunting/Fishing</u>
FY 92	\$ 260	\$ 200
FY 93	\$ 800	\$ 0
FY 94	<u>\$40,000</u>	<u>\$ 200</u>
	\$41,060	\$ 400

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$3,427,000	\$3,959,000
FY 95	\$ 0	\$9,952,000
FY 96	\$ 0	\$6,949,000
FY 97	\$ 0	\$4,422,000
FY 98	\$ 0	\$4,762,000
FY 99	<u>\$ 0</u>	<u>\$4,819,000</u>
	\$3,427,000	\$34,863,000

b. Summary environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$5,500,000	\$ 320,000
FY 95	\$ 0	\$8,008,000
FY 96	\$ 0	\$9,185,000
FY 97	\$ 0	\$3,568,000
FY 98	\$ 0	\$ 565,000
FY 99	<u>\$ 0</u>	<u>\$ 98,000</u>
	\$5,500,000	\$21,744,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Story -- 51665

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	1,451
(2)	Cantonment area	571
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	491
(5)	Firing Ranges	119
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	270
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A contract for a survey for Federally listed threatened or endangered species has been awarded. However, no Federal or State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. No memoranda of agreement concerning cultural resources have been signed nor is there a Historic Preservation Plan for Fort Story.

b. A historic building inventory has been completed for approximately 33% of Fort Story and one structure, Cape Henry Lighthouse, is listed on the National Register of Historic Places.

c. All 1,451 acres have been surveyed for archeological resources and there are no National Register eligible sites.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied from surface water and is purchased from the City of Norfolk, Virginia. The design capacity is 4.14 MGD and average daily use is 0.2 MGD.

b. Wastewater.

Wastewater is disposed of under contract with Hampton Roads Sanitation District. Maximum design capacity is 1.78 MGD and average daily use is 0.25 MGD. The current permit allows for 0.4 MGD.

c. Solid Wastes.

Solid waste is disposed of via contract with Navy PWC and BFI Industries. The main post contract value is \$94,400 and the family housing contract value is \$26,000. Average daily volume is six tons/day for the Navy and BFI Industries daily volume is 2.98 tons/day. Solid waste disposal cost \$31.73/cu yd. There are three closed landfills on Fort Story totaling 11.5 acres.

5. AIR QUALITY.

a. The installation is in Environmental Protection Agency (EPA) Air Quality Region VI.

b. The region is not in attainment for ozone.

c. The air pollution sources are watercraft vehicle training, generators, and oil furnaces.

d. The installation has no air emission credits.

e. There are no projects mentioned to meet/maintain compliance.

f. Fort Story is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort Story is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated Sites.

The installation has identified 11 (6 active & 5 inactive) Defense Environmental Restoration Account (DERA) eligible sites.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey is complete and there were no contaminated transformers identified.

d. Underground Storage Tanks (UST) .

There are 130 USTs (126 active & 4 abandoned) at Fort Story. Seven have been tested, one failed, and none have been replaced/repared.

e. Radioactive Materials and Sources.

There are no radiological materials requiring Nuclear Regulatory Commission (NRC) or DA licensing at Fort Story.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$1,011,000	\$ 324,000
FY 95	\$ 0	\$1,484,000
FY 96	\$ 0	\$ 755,000
FY 97	\$ 0	\$2,508,000
FY 98	\$ 0	\$ 572,000
FY 99	\$ 0	\$ 353,000
	<u>\$1,011,000</u>	<u>\$5,996,000</u>

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 931,000	\$1,899,000
FY 95	\$ 0	\$ 541,000
FY 96	\$ 0	\$1,745,000
FY 97	\$ 0	\$1,942,000
FY 98	\$ 0	\$ 712,000
FY 99	\$ 0	\$ 35,000
	<u>\$ 931,000</u>	<u>\$6,874,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Gordon -- 13055

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	55,588
(2)	Cantonment area	5,588
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	37,000
(5)	Firing Ranges	13,000
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area (approx. undergoing a wetlands delineation)	11,000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Impact Areas (includes (5) and (6) above)	N/A 13,000

b. Air Space.

(1)	Restricted Air Space.	8,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A survey was conducted by the US Fish & Wildlife Service, titled Fort Gordon Endangered and Threatened Species Survey, dated 30 Sep 92. The following Federal and/or State species were identified: Threatened - Bald Eagle (State & Federal), Pickering Morning Glory (State), Indian Olive (State), and Gopher Tortoise (State); Endangered - Red-Cockaded Woodpecker (State & Fed), and Sweet Pitcher Plant (State); and Status Review - Pickering Morning Glory, Bachman's Sparrow, American Kestrel, Loggerhead Shrike, Pine-Gopher Snake, Southeastern Hognose Snake, Gopher Tortoise, and Southeastern Bat. The installation is following existing best management practices (BMPs) and coordinates with U.S. Fish and Wildlife Service (USFWS) when appropriate. The only constraint imposed upon the installation development and operations is to observe the 200 foot buffer zone around the

Red Cockaded Woodpecker (RCW) cavity trees.

3. CULTURAL RESOURCES.

a. No Historic Preservation Plan/Cultural Resource Management Plan has been prepared for Fort Gordon.

b. A historic building inventory has been completed for Fort Gordon; no buildings were recommended as being eligible for the National Register.

c. Approximately 44,176 of the total 55,588 acres that make up Fort Gordon have been surveyed for archeological resources. A total of 180 archeological sites have been found that may be eligible for the National Register. Additional archeological surveys will be necessary to complete the Fort Gordon archeological inventory. There is currently storage of archeological artifacts.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Ninety-seven percent of potable water comes from surface water sources and 3% from 13 wells. The total groundwater use is 0.25 MGD with a 0.5 MGD total pumping capacity. The wells were installed at varying dates. They are expected to last an indefinite period with normal maintenance. An additional 4.1 MGD is available from commercial sources. The total surface water design capacity is 5.40 MGD with an average daily use of 3.5 MGD. Total potable water capacity from all sources is 10.0 MGD. A water treatment plant was constructed in 1969 and is expected to last for another 50 years with some upgrades based upon increasing regulatory requirements.

b. Wastewater.

A wastewater treatment plant exists with a design capacity of 5.0 MGD and an average use of 1.7 MGD and an expected useful life of 50 years with some upgrading required. The system operates under a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

An existing 25-acre landfill will continue to be used provided that requested funds are received, if not local landfills will be used. Total remaining landfill capacity is 36,00 tons, with an estimated life of four years.

5. AIR QUALITY.

- a. The air quality region is the Northeast Georgia Region, State of Georgia.
- b. The region is in attainment.
- c. Air pollution sources are: Controlled burns; heating/cooling plants, vehicular traffic, accidental fires, and painting/coating operations, and fire fighter training.
- d. The installation has no air emission credits.
- e. A total of 29 air compliance projects have been identified between FY 94- FY 01.
- f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

- a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B hazardous waste permit for one year storage in one facility (Bldg 10701).

- b. Contaminated Sites.

An assessment was conducted by the US Army Environmental Hygiene Agency, February-June, 1989. Twenty-three (23+) plus Defense Environmental Restoration Account (DERA) eligible sites were identified.

- c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed. A total of 154 contaminated transformers were identified and 62 were replaced.

- d. Underground Storage Tanks (UST).

There are 368 total tanks of which eight are regulated. All eight have been inspected and passed.

- e. Radioactive Materials and Source.

No licenses are required for radiological materials or sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Installation revenue generating programs are present. No source identified. Estimated revenues are as follows:

FY 92	\$78,000
FY 93	\$80,000
FY 94	\$156,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>FUNDED</u>	<u>UNFUNDED</u>
FY 94	\$ 833K	\$7,160K
FY 95		10,705K
FY 96		9,050K
FY 97		9,031K
FY 98		9,053K
FY 99		5,459K
	<u>\$ 833K</u>	<u>\$50,458K</u>

b. Restoration costs estimated as follows:

	<u>FUNDED</u>	<u>UNFUNDED</u>
FY 94	\$ 0	\$1,064K
FY 95		1,378K
FY 96		1,111K
FY 97		1,060K
FY 98		294K
FY 99		252K
	<u>\$ 0</u>	<u>\$5,159K</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Huachuca -- 04005

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	102,825
(2)	Cantonment area	5,540
(3)	Maneuver area	20,263
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	35,484
(5)	Firing Ranges	11,985
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	35
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	29,553

b. Air Space.

(1)	Restricted Air Space. (per previous report)	73,272
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	300

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

With the exception of amphibians and butterfly species, the Southwest Field Biologist-Donna Howell conducted a TES survey. A biological assessment has been conducted only for the Lesser Long-nosed Bat. The Federally listed threatened Lesser Long-nosed Bat occurs on the installation, and has resulted in some mission activities being constrained. Constrained have been placed on training, testing and construction activities that may affect the Long-nosed Bat feeding behavior, or agave plants, which are the primary food source for Lesser long nosed bats. The installation has developed an extensive list of Federally listed and candidate endangered and threatened species and species of concern to the State of Arizona and other entities. Some of the species may occur on the installation, while for many of the others they are known to occur in the vicinity of the Fort Huachuca. The Federally listed threatened Southwestern Bald Eagle and Peregrine Falcon are occasionally known to

occur on the installation. The threatened Mexican Spotted Owl is also reported to occur on the installation. Any development or mission activities must consider potential impacts on these species.

3. CULTURAL RESOURCES.

a. Fort Huachuca does not currently have a Historic Preservation Plan (HPP). The U.S. Army Corps of Engineers, Los Angeles District is preparing the HPP.

b. A historic building survey has been completed for 60% of Fort Huachuca. As a result of this study 62 structures were listed and the nomination packages of three others being reviewed by State Historic Preservation Officer (SHPO). Determination of eligibility for 81 structures remain to be coordinated with SHPO, for a total of 84 potentially eligible for the National Register.

c. Archeological surveys have been conducted for 42,000 acres (57%) of the installation. A total of 295 eligible or potentially eligible archeological sites have been found by these investigations. Additional archeological surveys are needed to complete the inventory of Fort Huachuca lands. Estimated that 1% of the total land available may be restricted due to the survey findings.

d. The Native American community was consulted with during recording of the Rocky Mountain Sites (National Register Site). Individual agreements allow Native Americans to collect plant specimens.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is provided by eight production wells, with a total pumping capacity of 8.06 MGD. However, total pumping capacity is limited by storage capacity to 6.0 MGD. Average daily use is 2.7 MGD. Drawdown rate is seven feet per year. A system to deliver spring water with a capacity of 0.11 MGD is in place but not used.

b. Wastewater.

A wastewater treatment plant with a treatment capacity of 3.85 MGD will be on line in the summer of 1995. The average daily use is about 2.1 MGD. There is National Pollutant Discharge Elimination System (NPDES) permit, however, an Aquifer Protection Permit is required from the State of Arizona.

c. Solid Wastes.

The installation waste landfill contract is with Huachuca City landfill and Waste Management of Southeast Arizona. There is no limitation and the current daily volume is 17.3 tons, at a cost of \$35/ton. The total contract value is \$555,947.00.

5. AIR QUALITY.

a. The air quality region is the Federal Environmental Protection Agency (EPA) Region IX; State: Arizona Department of Environmental Quality; Local: Southeast Arizona Intrastate Air Quality Control Region. State ADEQ regulates Fort Huachuca.

b. Fort Huachuca is classified as Class II attainment.

c. Air pollution sources are: boilers, incinerators, generators, misc heating systems, fuel storage and dispensing, paint spray booths, degreasing, wood working, pesticide and herbicide applications, etc.

d. The installation has no air emission credits.

e. The installation has identified major projects to meet/maintain air compliance.

f. Fort Huachuca is bordered on the south and west by Colorado National Forest. Various other areas considered to be part of Colorado National Forest are also within 100 km. Also included within the 100 km radius are: Saguaro National Monument, Chiricahua National Monument, and the Chiricahua Wilderness. There are several counties within the 100 km radius that are in non-attainment.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Installation does not hold any Resource Conservation and Recovery Act (RCRA) permits.

b. Contaminated Sites.

A survey was conducted by the US Army Toxic and Hazardous Materials Agency in June of 1980. Twenty six Defense Environmental Restoration Account (DERA) sites have been identified. Contaminated areas include 10 former landfills, burn pits, and Explosive Ordinance Disposal (EOD) areas.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed. An estimated 650 contaminated transformers have been replaced.

d. Underground Storage Tanks (UST).

There are 39 active and five abandoned tanks reported. Thirteen USTS have been tested with no failures, and 13 tanks have been repaired or replaced.

e. Radioactive Materials and Sources.

Installation reports one MEDAC DA Radiation Authorization, used for lead paint survey. However, the installation reports no facilities require decommissioning.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Fish and wildlife use permits generated:

FY 92	\$6,107.50
FY 93	\$2,713.00
FY 94	\$2,216.00

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY94	\$3,772K	\$1,645K
FY95		6,610K
FY96		5,582K
FY97	3,500K	1,700K
FY98	3,500K	1,700K
FY99	<u>3,500K</u>	<u>1,700K</u>
	\$14,272K	\$18,937K

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY94	\$ 785K	\$
FY95		1,145K
FY96		790K
FY97		390K
FY98		290K
FY99		290K
	<u>\$ 785K</u>	<u>\$2,905K</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Jackson -- 45455

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	52,301
(2)	Cantonment area	5,140
(3)	Maneuver area	35,607
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	6,422
(6)	Non-Impact Firing Range	5,132
(7)	Wetlands Sec 404 area	5,559
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

- (1) Restricted Air Space.
R6001 - small arms: ground level to 3,200 ft with 3 mile buffer around installation.
R6001 - Control from ground level to 23,000 ft with 5 mile buffer.
- (2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). 0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has been conducted and three Federally listed endangered species are reported to occur on the installation, the Red-cockaded Woodpecker (decreasing), Rough-leaved loosestrife (increasing), and the Smooth Conflower (stable).

3. CULTURAL RESOURCES.

- a. A Historic Preservation Plan is currently under development.
- b. A historic building inventory is scheduled to be completed in August 1994. To date, 30 structures have been found to be potentially eligible for the National Register of Historic Places.
- c. Archeological surveys have been conducted for approximately 42,548 acres, with 128 sites found to be potentially eligible for the National Register. The installation stores archeological artifacts and associated records. A total of 11 acres (11 archeological sites) are not available for development or operations due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Ninety-nine percent of potable water is supplied by the City of Columbia and the rest by eight ground wells. The City of Columbia supplies up to 9.35 MGD with an average use of 3.5 MGD. The maximum pumping capacity of the eight wells is 0.05 MGD and the average use of the well water is 0.04 MGD. The wells only supply water to ranges and field sites.

b. Wastewater.

Wastewater disposal is carried out through contract with the City of Columbia. The contract quantity is 9.2 MGD and average use is 2.9 MGD.

The installation holds a National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge from a storage tank containment wall and small waste water treatment plant at Weston Lake Recreational Area.

c. Solid Wastes.

The on-post landfill is closed. Solid waste is disposed of by a \$4,180,000 contract with BFI. Average daily volume is 25 tons/day at a cost of \$16.50/ton. The existing county landfill can service Fort Jackson for approximately 10 years.

5. AIR QUALITY.

- a. The installation is located in the Environmental Protection Agency (EPA) Air Quality Central Region 200.
- b. The region is in attainment.
- c. Air pollution sources are: energy plant boilers, hot water boilers, filtered paint spray booths, fiberglass filtered spray booths, pathological incinerator, and controlled and prescribed burning.
- d. The installation has no air emission credits.
- e. Major projects identified in the A-106 Plan to meet/maintain air compliance are the removal and replacement of stack rain caps at the energy plant - and the update of the emissions inventory and permit.
- f. The installation is not within 100 Km of a critical Air Quality Region.

6. HAZARDOUS MATERIALS/SITES.

- a. Use of hazardous materials.

Fort Jackson holds a Resource Conservation and Recovery Act (RCRA) Part B permit (90 day or longer) for a hazardous waste storage facility site for disposal at the DRMO. The installation has submitted an application for a RCRA, Subpart X permit for open burning/detonation of RCRA regulated waste munitions.

- b. Contaminated Sites

The installation has identified 46 solid waste management units (SWMU). Work plan for SWMU investigations are currently under review by EPA. Project to assess contamination at former UST sites is currently underway.

- c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and a total of 88 contaminated transformers were identified and replaced.

Lead based paint abatement is conducted in family housing as necessary.

A post wide asbestos inventory is completed and all known asbestos has been removed.

Installation wide Radon testing has been completed and Fort Jackson does not exceed the health based standard.

d. Underground Storage Tanks (UST) .

Out of 66 active USTs (7 regulated & 59 non-regulated), seven were tested and none failed.

e. Radiological Materials and Sources.

The installation holds a Nuclear Regulatory Commission (NRC) license for medical use. Decommissioning is required for the Nuclear Medical Clinic and Radiation Protection Office.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs are as follows:

	<u>1992</u>	<u>1993</u>	<u>1994</u>
Forestry	\$235,000	\$301,000	\$450,000
Hunting/Fishing	21,000	20,000	22,000
Recycling	<u>185,000</u>	<u>448,000</u>	<u>242,000</u>
	\$441,000	\$769,000	\$714,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$3,759,000	\$2,349,000
FY 95	\$5,743,000	\$2,579,000
FY 96	\$4,778,000	\$2,351,000
FY 97	\$3,812,000	\$ 143,000
FY 98	\$3,281,000	\$ 247,000
FY 99	<u>\$2,816,000</u>	<u>\$ 149,000</u>
	\$24,189,000	\$7,818,000

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$1,037,000	\$ 500,000
FY 95	\$3,265,000	\$1,850,000
FY 96	\$18,700,000	\$1,500,000
FY 97	\$10,700,000	\$1,500,000
FY 98	\$5,700,000	\$ 0
FY 99	\$2,600,000	\$ 0
	<u>\$42,002,000</u>	<u>\$5,350,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Knox -- 21405

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	109,054
(2)	Cantonment area	6,861
(3)	Maneuver area	47,994
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	53,112
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	900
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	1,237

b. Air Space.

- (1) Restricted Air Space.
R370B up to 20,000 feet over ranges and impact areas.
- (2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).
The final joint land use agreement is to be complete in FY 94.

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey was completed in March 1994 and the installation was found to contain the potential habitat for the Federally listed endangered Gray Bat and Indiana Bat. There are also suspected existence of some endangered flora at the installation. Despite the presence of these species, the military mission has not been constrained, due to the location of the species in off limit stream areas and inaccessible areas.

3. CULTURAL RESOURCES.

- a. A Historic Preservation Plan is currently under review.

b. A historic building survey has been completed, and five buildings/structures have been submitted to the State Historic Preservation Officer (SHPO) for potential eligibility for the National Register of Historic Places.

c. Approximately 30,000 acres have been surveyed for archeological resources and a total of 12 archeological sites have been found that may be eligible for the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is acquired from 12 wells and one surface water source. The wells provide 66% of the daily use requirement. The total pumping capacity of the wells is 10.5 MGD and the average use from this source is 2.5 MGD. The drawdown rate is 30-50 GPM/SF. This water is processed through a water treatment plant which has a 7.0 MGD capacity. The average use from the surface water source is 1.5 MGD, which is processed through a water treatment plant with a design capacity of 3.5 MGD. The life expectancy of these systems is 20+ years.

b. Wastewater.

The design capacity of the current wastewater treatment plant is 6.0 MGD and has an average use of 3.5 MGD. A new 6.0 MGD wastewater treatment facility is under construction and will be in operation in 1994. The installation operates under a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

Residential solid waste is transported to a regional landfill under a \$1,861,000 contract for FY 94 with Reliable Trash. Average daily volume is 70 tons a day at a cost of \$80.00/ton.

A 35 acre construction/debris landfill exists on post and its operation is conducted under a \$471,000 contract for FY 94 with Reliable Trash. Average daily use is 244.5 tons/day at a cost of \$24.80/ton. The landfill has a capacity of 1,314,000 cubic yards and has a life expectancy of 23 years.

5. AIR QUALITY.

- a. Ft. Knox is in the Kentucky North Central Air Quality Region.
- b. The region is in attainment.
- c. Air pollution sources are: boiler plants, a pathological incinerator, vehicle training, auto emissions, paint booths, and dust collectors.
- d. The installation has no air emission credits.
- e. No major air compliance projects were reported.
- f. The installation is within 100 km of a critical air quality region (The City of Louisville, Kentucky).

6. HAZARDOUS MATERIALS/SITES.

- a. Use of hazardous materials.

The installation has a Part B permit (90 day or longer) for one hazardous waste storage site, operated by DRMO. A Resource Conservation and Recovery Act (RCRA), Subpart X for open burning/detonation is being negotiated with the Environmental Protection Agency (EPA) for Explosive Ordinance Disposal (EOD) operations.

- b. Contaminated Sites.

An assessment to determine contamination has been conducted and an assessment is ongoing for all identified solid waste management units (SWMU). A total of 18 Defense Environmental Restoration Account (DERA) eligible sites have been identified at the installation.

- c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey 95% complete. Under current electrical upgrade contracts all remaining in-service PCB equipment will be removed and disposed.

- d. Underground Storage Tanks (UST).

There are a total of 244 active and 45 abandoned USTs. Two hundred and sixty-nine were tested and 25 failed. A total of 80 have been removed and none replaced/repaired.

e. Radioactive Materials and Sources.

Nuclear Regulatory Commission (NRC) licenses are held for medical treatment materials. No decommissioning requirements for radiological materials were reported.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs are as follows:

	<u>1992</u>	<u>1993</u>	<u>1994</u>
Forestry	\$101,000	\$219,000	\$ 2,000
Hunting/Fishing	<u>143,000</u>	<u>144,000</u>	<u>149,000</u>
	\$244,000	\$363,000	\$151,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$4,662,000	\$ 485,000
FY 95		\$7,501,000
FY 96		\$6,613,000
FY 97		\$5,218,000
FY 98		\$4,203,000
FY 99		<u>\$2,313,000</u>
	<u>\$4,662,000</u>	\$26,333,000

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$3,259,000	\$ 355,000
FY 95		\$3,470,000
FY 96		\$1,375,000
FY 97		\$1,125,000
FY 98		\$ 425,000
FY 99		<u>\$ 425,000</u>
	<u>\$3,259,000</u>	\$7,175,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Lee -- 51315

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	5,574
(2)	Cantonment area	2,264
(3)	Maneuver area	1,535
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	1,445
(6)	Non-Impact Firing Range	8
(7)	Wetlands Sec 404 area (Inventory in progress)	est. 1,000
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	640
	31 IRP sites	
	3 conservation zones	

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zone III	335

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

One Federally listed threatened (State endangered) species, the Bald Eagle (*Haliaeetus leucocephalus*), and four State listed threatened species, Damselfly Attenuated Bluet (*Enallagma daeckii*), Lesser Siren (*Siren intermedia*), Beakrush (*Rhynchospora perplexa*), and Virginia Thistle (*Cirsium virginianum*) occur on the installation. A nesting pair of Bald Eagles restricts activities within a third of a mile radius of the nest. The impact of the conservation zone should be minimal to operations since the area primarily occurs in the Blackwater Swamp and within range of the safety fan.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan is scheduled for completion in FY 95.

b. A historic building survey has been completed for Fort Lee. Fort Lee has three WW II structures that are considered unique by the Commonwealth of Virginia. Two of the facilities are administrative and the third is a cook training facility.

c. Archeological surveys of 3,609 acres found 15 potentially eligible sites. Artifacts are curated at the Department of Historical Resources, Commonwealth of Virginia.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by two contracts with the City of Petersburg and Virginia American Water Company (Hopewell, VA), and comes from surface water. Fort Lee's contracts provide for up to 6.0 MGD with an average use of 1.3 MGD. In addition, Fort Lee operates post chlorination facilities and utilizes a chloramine system in order to avoid the production of trihalomethanes (THM).

b. Wastewater.

Wastewater discharge is disposed of through contract with the Hopewell Regional Wastewater Treatment Plant. The maximum sewage flow limit is 2.5 MGD and average sewage outflow is 1.06 MGD. The primary treatment plant is near capacity due to local residential development. Fort Lee may partner with the local community for any equalization, or other cost effective alternative, identified via inflow/infiltration (I/I) study as a means of mitigating Fort Lee's impact on future regional needs.

c. Solid Wastes.

Fort Lee will award a comprehensive solid waste contract for FY 95 which will encompass three primary areas: solid waste, recycling, and yard waste. The current average disposal rate is 10 tons/day. Anticipated cost of the package is \$1,000,000. The current tipping fee at the nearest landfill is \$28/ton.

5. AIR QUALITY.

a. The air quality region is the Virginia State Capital Interstate Air Quality Control Region (Region V).

- b. The region is in attainment.
- c. Air pollution sources are: heating system plants, paint spray booths, and vehicular traffic.
- d. The installation has no air emission credits .
- e. There are two projects identified to meet/maintain air compliance, Update Air Permits and Replace Halon Fire Systems.
- f. The city is within 100 km of critical air quality regions (Chesterfield County & City of Hopewell).

6. HAZARDOUS MATERIALS/SITES.

- a. Use of hazardous materials.

Fort Lee does not have a Resource Conservation and Recovery Act (RCRA) Part B permit, but is under a "permit by rule." Fort Lee has declared itself a large quantity generator. Three 90-day temporary storage facilities (DPW Hazardous Waste Storage, Navy Print Plant, & Seaman's Petroleum Lab) are operated on the installation.

- b. Contaminated Sites.

There are 31 Installation Restoration Program (IRP) sites on the installation, 18 of which are active.

- c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey has been completed. Thirty-one PCB contaminated transformers remain at Fort Lee. All others have been disposed of.

All permanent, semi-permanent, and some temporary buildings have been surveyed for asbestos. An active management program is remediating or removing damaged or friable asbestos.

A radon survey reported no high readings.

- d. Underground Storage Tanks (UST).

Currently there 95 USTs remaining on Fort Lee. Three UST projects are scheduled for FY 95. When all UST projects are complete, less than 30 USTs will remain. Four tanks are known to leak and twelve are abandoned.

e. Radioactive Materials and Sources.

The installation does not hold any Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials.

7. OTHER ISSUES, CONSTRAINTS.

The installation has five National Pollutant Discharge Elimination System (NPDES) permitted outfalls: three at spill containment ponds (petroleum training areas) and two at water training facilities.

8. REVENUE GENERATING PROGRAMS.

	<u>Forestry</u>	<u>Hunting</u>
FY 92	\$ 883	\$ 0
FY 93	\$ 450	\$ 968
FY 94	\$ 475	TBD

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance cost are:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$2,752,000	\$ 158,000
FY 95	\$ 0	\$3,701,000
FY 96	\$ 0	\$1,078,000
FY 97	\$ 0	\$ 947,000
FY 98	\$ 0	\$ 925,000
FY 99	\$ 0	\$ 759,000
	<u>\$2,752,000</u>	<u>\$7,568,000</u>

b. Summary of environmental restoration cost are:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$1,605,000	\$ 0
FY 95	\$ 0	\$1,312,000
FY 96	\$ 0	\$ 387,000
FY 97	\$ 0	\$ 822,000
FY 98	\$ 0	\$ 218,000
FY 99	\$ 0	\$ 14,000
	<u>\$1,605,000</u>	<u>\$2,753,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Leonard Wood -- 29995

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	62,911
(2)	Cantonment area	6,139
(3)	Maneuver area	3,210
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	6,837
(5)	Firing Ranges	310
(6)	Non-Impact Firing Range	17,168
(7)	Wetlands Sec 404 area (Impounded surface water & impact areas not included)	695
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	3,521
	Lakes & ponds	105
	Landfills	248
	Cultural resources	245
	Contaminated sites	3
	Species buffer	80
	Recreation	2,840

b. Air Space.

(1)	Restricted Air Space.	19,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Potential Zone (NAPZ).	
	Zone II	11,597
		(81 meters off-post)
	Zone III	5,015

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey is in progress. However, three Federal Endangered species (Indiana Bat, Gray Bat, and Bald Eagle), three Federal/State Candidate species (Cerulean Warbler Butternut, Royal Catchfly, and Central Missouri Cave Amphipod) and one State Candidate species (Grotto Salamander) are reported to occur on the installation. The most notable constraint created by these species are limitations in development of ranges and other training facilities near three caves reported to be used by

the bats.

3. CULTURAL RESOURCES.

- a. A historic preservation plan has been prepared.
- b. A historical building has been conducted. Thirteen structures have been identified as potentially eligible for the National Register for Historic Places.
- c. Approximately 46% of the installation has been surveyed for archeological resources. A total of 94 potential archeological sites are eligible for the National Register. Surveys must be done prior to digging in unsurveyed areas on the installation. A total of 445 acres are not available for development due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Approximately 95% of potable water is from a surface water source. Five percent of the potable water is well water. Six wells exist on the installation, however only one is connected to the central water system. The one well's pumping capacity is 0.32 MGD with an average daily usage of 0.19 MGD. The pumping station on the river has a capacity of 11 MGD with an additional emergency backup of 3 MGD. The water treatment plant has a design capacity of 9.8 MGD and an average use of 3.76 MGD. The distribution system requires some upgrade for various components, but has an overall unlimited life expectancy with routine maintenance.

b. Wastewater.

The wastewater treatment plant has a design capacity of 8.4 MGD and an average flow of 2.3 MGD. The plant operates under a National Pollutant Discharge Elimination System (NPDES) permit. There are no known constraints to maintaining/increasing wastewater treatment.

c. Solid Wastes.

Solid waste disposal is contracted with an average daily volume of 32 tons/day at a cost of \$61.54/day. The contract amount is \$946,136. There is no limit on increasing the contract amount.

There is also a 2.11-acre demolition landfill with a capacity of 170,000 tons and a remaining life expectancy of two years. Additional space for expansion.

5. AIR QUALITY.

- a. The air quality region is Out-state Missouri, regulated by Missouri Department of National Resources.
- b. The region is in attainment.
- c. Air pollution sources are: space heating boilers and furnaces, one incinerator, quarry operation, fuel storage tanks, and controlled burning.
- d. The installation has no air emission credits.
- e. No major projects were identified in the A-106 plan to meet/maintain compliance.
- f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

- a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Interim permit. A RCRA Part B permit is currently being processed for container storage and open burning/open detonations (OB/OD).

- b. Contaminated Sites.

Total of seven Defense Environmental Restoration Account (DERA) eligible sites are identified.

- c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed. A total of 223 contaminated transformers have been identified and replaced.

- d. Underground Storage Tanks (UST).

There are 22 active and no abandoned USTs at Fort Leonard Wood. Fifty-two have been removed. A total of 74 were replaced/repared, 24 tested, and three failed.

e. Radioactive Materials and Sources

The installation holds a Nuclear Regulatory Commission (NRC) license for radiopharmaceuticals and DA license for various materials and isotopes for medical use. A total of 16 rooms (approximately 6,000 SF) in the Nuclear Medicine Clinic and Health Physics portions within the hospital require surveying and cleaning prior to decommissioning.

7. OTHER ISSUES, CONSTRAINTS.

There are no other environmental issues.

8. REVENUE GENERATING PROGRAMS.

The estimated combined revenues from agricultural leases, timber sales, and fish and wildlife use permits are:

FY 92	\$ 51,000
FY 93	\$120,500
FY 94	\$110,700

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$3,460,000	\$2,063,000
FY 95	\$ 0	\$3,271,000
FY 96	\$ 0	\$2,467,000
FY 97	\$ 0	\$1,506,000
FY 98	\$ 0	\$1,316,000
FY 99	\$ 0	\$1,392,000
	\$3,460,000	\$12,015,000

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 220,000	\$1,352,000
FY 95	\$ 0	\$ 600,000
FY 96	\$ 0	\$ 90,000
FY 97	\$ 0	\$ 90,000
FY 98	\$ 0	\$ 450,000
FY 99	\$ 0	\$ 90,000
	\$ 220,000	\$2,672,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort McClellan -- 01102

1. LAND USE.

a. Land Availability (estimated quantities in acres).

	Main Post	Pelham Range	Talladega Nat'l For
(1) Installation total	23,434	22,245	82,500
(2) Cantonment area	2,831	0	0
(3) Maneuver area	19,249	17,486	182,500
(4) Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0	0	0
(5) Firing Ranges	210	4,759	0
(6) Non-Impact Firing Range	0	0	0
(7) Wetlands Sec 404 area (1,451 included in item 1.A.(3) above)	0		
(8) Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	1,144	0	0

b. Air Space.

(1) Restricted Air Space.	0	0	0
(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).			
Zone II -	147		
Zone III -	8		

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted. Two Federally listed TES occur on the installation; the threatened *Marshallia Mohrii* and the endangered Tennessee Yellow-eyed Grats (*Xyris Tennesseeensis*). An informal consultation has occurred and an interim Endangered Species Management Plan has been completed and reviewed by the U.S. Fish and Wildlife Service (USFWS).

3. CULTURAL RESOURCES.

a. There is no Historic Preservation Plan/Cultural Resources Management Plan for the installation. However, comments are obtained from the State Historic preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP) for undertakings that effect historic properties.

b. A historic building survey has been conducted and 89 structures are reported as eligible for listing on the National Register of Historic Places.

c. An archeological survey has been completed for 36,543 acres. A total of 32 archeological sites are reported as potentially eligible for listing on the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

A total of 99.93% of potable water is provided by contract with Anniston Water Works and Sewer Board. Maximum capacity is 15.0 MGD and average daily usage is 1.5 MGD.

The remaining 0.07% is obtained from five (4 - Pelham range & 1- Reilly Lake) spring-fed wells (Coldwater Springs). The total pumping capacity of the wells is 0.05 - 0.06 MGD. The average daily use is 0.005 MGD (0.001 MGD per well).

b. Wastewater.

Wastewater generated at the installation is treated at the Ft. McClellan Wastewater Treatment Plant, which operates under contract with the Anniston Water and Sewer Board. The plant has a capacity of 2.2 MGD and an average daily use of 1.2 MGD. MCA project upgrades will be completed in July 1994. The life expectancy is 25 years. An application has been made for a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

Solid waste disposal is provided by a \$4,000/month contract with Johnson Controls, Pickup Service - Urban Sanitation - Landfill. Average volume is 20 tons/day at a cost of \$27.50/ton.

A 12.5 acre construction/demolition debris landfill exist on post with a remaining capacity of 13,000 tons and a life expectancy of 15 years.

5. AIR QUALITY.

a. The air quality region is the East Alabama Interstate Air Quality Region, Alabama Department of Environmental Management.

b. The region is in attainment.

c. Air pollution sources are: boilers, incinerators, generators and pumps, fuel storage and dispensing, paint spray booth operations, degreasing operations, woodworking operations, fugitive HAP/VOC emissions, pesticides, herbicides, wastewater treatment, prescribed burning, fog oil generators, welding operations, and miscellaneous heating.

d. The installation has no air emission credits.

e. There are no major projects reported to meet/maintain air quality.

f. There are no critical air quality regions within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort McClellan is in the process of obtaining a Resource Conservation and Recovery Act (RCRA) permit for open burning/open detonation. The permit is currently in an interim status.

b. Contaminated Sites.

Thirty (12 active) Defense Environmental Restoration Account (DERA) eligible contaminated sites have been identified .

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey is complete and the two contaminated transformers (>500 ppm) identified have been replaced. There are also 36 PCB non-regulated contaminated transformers (50 - 499 ppm) still in use.

It was previously reported that asbestos is remediated as buildings are renovated/demolished.

Radon survey is complete and no immediate remediation measures were previously required.

d. Underground Storage Tanks (UST).

There are 70 active UST's and 25 removed/closed in place. Thirty-five have been tested in the past year and none failed. In the past three years 36 have been replaced.

5. Radioactive Materials and Sources.

The installation holds three Nuclear Regulatory Commission (NRC) licenses and one DA license for radioactive materials and sources. The NRC licenses are for Type C broad scope by-product material for research/development and education; special nuclear material for calibration and training; and by-product material, CO-60 and CS 137 for surface contamination. The DA license is for Cobalt 57 for use and storage of a lead paint analyzer. Decommissioning is required for 25 rooms in building 1081.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs and revenues are as follows:

	<u>Forestry</u>	<u>Fish/Game</u>
FY 92	\$173,290	\$ 17,826
FY 93	\$341,179	\$ 32,726
FY 94	<u>\$170,000</u>	<u>\$ 38,000</u>
	\$514,639	\$ 88,552

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$4,274,000	\$3,246,000
FY 95	\$ 0	\$8,136,000
FY 96	\$ 0	\$6,091,000
FY 97	\$ 0	\$3,419,000
FY 98	\$ 0	\$2,406,000
FY 99	\$ 0	\$1,712,000
	<u>\$4,274,000</u>	<u>\$25,010,000</u>

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$1,950,000	\$1,450,000
FY 95	\$ 0	\$3,300,000
FY 96	\$ 0	\$6,850,000
FY 97	\$ 0	\$3,250,000
FY 98	\$ 0	\$1,200,000
FY 99	\$ 0	\$ 700,000
	<u>\$1,950,000</u>	<u>\$16,750,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Rucker -- 01252

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	63,503
(2)	Cantonment area	5,355
(3)	Maneuver area	37,968
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring None - ITAM not implemented yet	
(5)	Firing Ranges (includes 912 acres of wetland)	13,000
(6)	Non-Impact Firing Range	NONE
(7)	Wetlands Sec 404 area 7,421 are in the maneuver area. Fort Rucker has a wetlands survey planned and financed; it is to be completed in the near future.	9,573
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	4,319
	Stagefields/Basefields 3,600 (off-post)	
	Surface Water	719

b. Air Space.

(1)	Restricted Air Space.	32,169
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zone II - 85,197 Zone III - 20,819	106,016

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted by Auburn University. Currently Fort Rucker has only one resident animal listed, the American alligator. At the Federal level, the alligator

is considered "threatened due to similarity of appearance". The endangered species that looks like the American alligator is not present on Fort Rucker. Fort Rucker also has two animals listed considered threatened by the State of Alabama (Federal Candidate Category 2), the Florida Pine Snake, and the Gopher Tortoise. These two animals both inhabit zeric, sandy habitats, and often live in close association with each other. In addition, the Federal candidate species (Category 2) Southeastern American Kestrel occurs on the installation. There have been sightings of a Bald Eagle in the vicinity of Lake Tholocco. Until nesting is confirmed or sightings increase significantly, the assumption is that the birds are not resident. There are no constraints due to TES imposed upon the installation.

3. CULTURAL RESOURCES.

a. No Historic Preservation Plan nor Cultural Resources Management Plan have been prepared for Fort Rucker.

b. World War II temporary buildings at Fort Rucker were examined by a study being conducted as part of a programmatic agreement concerning the recordation of World War II temporary buildings. No additional studies were recommended for those buildings.

c. Approximately 75% (43,329 acres) of the installation has been surveyed for archeological resources. Seven prehistoric-period and one historic sites were identified. The seven prehistoric sites have been recommended as being potentially eligible for the National Register. Additional archeological surveys are needed at Fort Rucker to inventory those lands not yet examined.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

The water source for the installation is from 15 wells with a total capacity of 7.6 MGD, and an average daily usage of 3.2 MGD. The drawdown rate is 32 feet.

b. Wastewater.

Two National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plants exist with a design capacity of 3.3 MGD and an average use of 1.5 MGD. Life expectancy is more than 10 years.

c. Solid Wastes.

All landfills were closed to receiving wastes before Oct 1993. Currently solid waste removal is provided through contract with Fairview Landscaping Inc, at an annual cost of \$665,421.12. Average daily volume of 16.7 tons/day, at a cost of \$20.00/ton.

5. AIR QUALITY.

a. The installation is located in Southeast Alabama Intrastate Region, regulated by the Alabama Department of Environmental Management.

b. The region is in attainment.

c. Air pollution sources are: boilers, medical waste incinerators, storage tanks, paint booths, burning, vehicular traffic, accidental fires, and helicopter engine testing, generators, fire fighting training, degreasing, wood working, pesticide/herbicides, wastewater treatment, landfills, welding, electroplating, wash-a-plane, laundry and other sources.

d. The installation has no air emission credits.

e. Major air compliance projects have been identified.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B container permitted storage site. The permit expires in August 1999. The installation has applied for a permit for Open burning/open detonation with an expected issuance date of November 1998.

b. Contaminated Sites.

An assessment to determine contamination has been done by Metcalf and Eddy, Inc. There are 33 Defense Environmental Restoration Account (DERA) eligible contaminated sites.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey has been completed. Fifty-eight contaminated transformers were identified of which 32 have been replaced.

Fort Rucker has an aggressive asbestos abatement program. An asbestos survey was completed in 1988. Since then all category 1, friable asbestos has been abated.

All of Fort Rucker has been surveyed for radon. Only 2 houses had readings that were slightly above the action level. The radon will be mitigated when the houses are renovated.

Lead-based paint is an issue in some family housing units and in some WWII wood buildings.

d. Underground Storage Tanks (UST) .

The installation has 109 active tanks, and 60 abandoned tanks. Fifty-three have been tested and 18 failed. Seventeen have been replaced with above ground tanks and one is awaiting repair.

e. Radioactive Materials and Sources

There is one Nuclear Regulatory Commission (NRC) license on Fort Rucker; #01-12632-01, for Cesium 137; Iodine 125; Carbon 14; Hydrogen 3; authorized for use in the in-vitro studies (RIA) and in-vivo animal studies. There are three laboratories where radioactive materials are used. The extent of decommissioning required is limited to these three areas and would require very limited surveying and/or cleanup.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are three revenue generating programs in place:

	<u>FY 92</u>	<u>FY 93</u>	<u>FY 94</u>
Forestry	\$487,000	\$356,000	\$650,000
Fish/Wildlife	18,600	20,400	20,000
Agri lease	0	975	665
	<u>\$505,600</u>	<u>\$377,175</u>	<u>\$670,665</u>

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs (\$000):

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 3,425	\$
FY 95		943
FY 96		4,064
FY 97		3,881
FY 98		2,221
FY 99		<u>1,916</u>
	<u>\$ 3,425</u>	<u>\$13,025</u>

b. Summary of environmental restoration costs (\$000):

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 2,477	\$
FY 95		3,140
FY 96		2,420
FY 97		250
FY 98		250
FY 99		<u>-</u>
	<u>\$ 2,477</u>	<u>\$ 6,060</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Sam Houston -- 48265

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	3,150
(2)	Cantonment area	1,840
(3)	Maneuver area	400
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	120
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	475
	Salado Park	- 25
	Golf course	- 409
	Landfills (closed)	- 41

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted, however it was previously reported that the endangered Black-capped Vireo and Golden-cheeked Warbler may occur on the installation. TES populations are stabilized.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan and implementing memorandum of agreement have been completed for Fort Sam Houston and has been reviewed by the State Historical Preservation Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP).

b. A historic building survey has been completed for Fort Sam Houston. A total of 795 buildings were found eligible or potentially eligible for listing on the National Register of Historic Places and many of them form the National Register district. Twenty-two buildings are in substandard condition and require extensive renovation at an estimated cost of \$6,600,000.

c. Archeological surveys have been completed for all approximately 3,105 acres of Fort Sam Houston and no archeological sites were found potentially eligible for the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

The source of potable water is 100% from a total of five wells with a total pumping capacity of 10.0 MGD and an average daily use of 3.112 MGD. The drawdown rate is 20%. The wells are rotated in operation.

b. Wastewater.

Wastewater disposal is accomplished by contract with the City of San Antonio. The average amount of effluent is 4.04 MGD. There is a National Pollutant Discharge Elimination System (NPDES) permit on the installation.

c. Solid Wastes.

All 11 landfills on installation property are inactive. Solid waste is now disposed of under a \$591,000 contract with Moore Services, Inc. Approximately 57.5 tons of solid waste is disposed of per day at a cost of \$27.00/ton.

5. AIR QUALITY.

a. The installation is located in Air Quality Region 217.

b. The region is in attainment.

c. Air pollution sources are: traffic, accidental fires, and paint booths.

d. The installation has no air emission credits.

e. No major projects were identified to meet/maintain air compliance.

f. There are no critical air quality regions within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated Sites.

The installation has identified one Defense Environmental Restoration Account (DERA) eligible contaminated site.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey is 50% complete, with no further information provided.

Asbestos removal process is ongoing.

Previously a Radon survey was reported to be in-progress.

A lead-based paint program is reported to be in-progress.

d. Underground Storage Tanks (UST).

All 20 active UST's were tested and none failed.

e. Radiological Materials and Sources.

The installation holds Nuclear Regulatory Commission (NRC) or DA license for medical radiological materials. The license is used for medical radiological requirements by Brooke Army Medical Center. No decommissioning requirements are reported to be required.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Real property leases generate \$18,514/year.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs :

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$5,226,000	\$3,323,000
FY 95	\$6,358,000	\$1,337,000
FY 96	\$3,406,000	\$2,670,000
FY 97	\$2,986,000	\$2,827,000
FY 98	\$3,131,000	\$2,989,000
FY 99	<u>\$2,916,000</u>	<u>\$3,100,000</u>
	\$24,023,000	\$16,248,000

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 0	\$ 110,000
FY 95	\$ 0	\$ 25,000
FY 96	\$ 0	\$ 20,000
FY 97	\$ 0	\$ 20,000
FY 98	\$ 0	\$ 20,000
FY 99	<u>\$ 0</u>	<u>\$ 40,000</u>
	\$ 0	\$ 265,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Camp Bullis -- 48145

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	27,994
(2)	Cantonment area	603
(3)	Maneuver area	21,169
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	675
(5)	Firing Ranges	5,892
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	22
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	1,630
	Blanco Strip -	206
	FAA Restricted -	89
	Closed landfills -	43
	Stormwater impoundments & primary steam channels -	385
	Blast hazard -	907

b. Air Space.

(1)	Restricted Air Space.	6,631
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	1,438

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted. Two TES, Black-capped Vireo and Golden-cheeked Warbler, occur on the installation. A Biological Assessment has not been assessed since the TES populations are stabilized.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan/Cultural Resources Management Plan has been completed for Camp Bullis and has been reviewed by the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (ACHP).

b. A historic building survey has been completed and 76 buildings were identified as eligible or listed on the National Register of Historic Places.

c. An archeological survey has been completed for 14,272 acres. Nineteen sites were identified as being potentially eligible for the National register. A total of 57 acres are unavailable for development and operations due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

The source of potable water is 100% from a total of two wells. The total pumping capacity of all wells is 0.6 MGD and the average use is 0.124 MGD. The wells have a drawdown rate of 50%

b. Wastewater.

The wastewater treatment plant has a design capacity of 0.4 MGD and an average daily usage of 0.2 MGD. The wastewater treatment plant is scheduled to be replaced under a FY 95 project.

c. Solid Wastes.

All 12 landfills on the installation are inactive. Details on current solid waste disposal measures were not provided.

5. AIR QUALITY.

a. The installation is located in Air Quality Region 6.

b. The region is in attainment.

c. Air pollution sources on Camp Bullis are: controlled underbrush burnings, traffic, and accidental fires.

d. The installation has no air emission credits.

e. The A-106 plan identifies an air pollution point source/emission project at Camp Bullis.

f. There are no critical air quality regions within 100 km of the installation.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Camp Bullis is under an Interim status for a Resource Conservation and Recovery Act (RCRA) Part B permitted hazardous waste storage. The RCRA Part B permit is expected to be issued in June 1994.

b. Contaminated Sites.

There are no Defense Environmental Restoration Account (DERA) eligible contaminated sites at Camp Bullis.

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey is 50% complete, with no further details provided.

Asbestos removal process is ongoing.

Lead-based paint removal process is ongoing.

d. Underground Storage Tanks (UST).

All four active tanks have been tested and passed.

e. Radiological Materials and Sources.

The installation does not hold any Nuclear Regulatory Commission (NRC) nor DA licenses for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Property leases generate \$21,415 per year.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 763,000	\$1,290,000
FY 95	\$ 668,000	\$1,290,000
FY 96	\$1,019,000	\$ 530,000
FY 97	\$ 923,000	\$ 490,000
FY 98	\$ 918,000	\$ 515,000
FY 99	<u>\$1,123,000</u>	<u>\$ 445,000</u>
	\$5,414,000	\$4,530,000

b. There are no environmental restoration costs requirements at Camp Bullis.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Sill -- 40755

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	94,220
(2)	Cantonment area	5,436
(3)	Maneuver area	36,007
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	14,719
(5)	Firing Ranges	38,058
(6)	Non-Impact Firing Range	Almost 0
(7)	Wetlands Sec 404 area	1,200
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	789
	Surface water -	451
	LETRA Rec Area -	150
	Landfill -	188

b. Air Space.

(1)	Restricted Air Space.	110,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	
	Zone II	100,000
	Zone III	50

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted. The Federally listed endangered Black-capped Vireo occurs on the installation but creates only minimal impacts on the conduct of the installation's mission.

3. CULTURAL RESOURCES.

a. A Historic Preservation Plan/Cultural Resources Management Plan has been completed and reviewed by the State Historic Preservation Officer (SHPO) or the Advisory Council for Historic Preservation (ACHP).

b. A historic building inventory is on-going. The installation reports a total of 765 historic properties, of which 49 are listed and 716 eligible for listing on the National Register of Historic Places. Fort Sill has a National Historic Landmark (NHL) District composed of 45 buildings and associated parade ground dating from the early 1870's through 1910's. Development within the NHL District is restricted in order to preserve the integrity of the setting and requires SHPO and ACHP coordination. Approximately one-fourth of the cantonment area is located within potential historic districts related to the evolution of the installation from a cavalry post to artillery center.

c. An archeological survey has been conducted of 51,706 acres and 251 sites were found potentially eligible. Approximately 100 acres are not available for development due to the presence of eligible or potentially eligible archeological sites, cemeteries and National Register of Historic Places listed sites.

d. Several nearby Native American groups (Apache, Kiowa and Comanche) frequent Fort Sill for ceremonies. Formal consultations with these groups has not been undertaken with regard to assessing traditional cultural properties except for access to archeological and ethnographic collections housed at the Fort Sill museum. No limitations exist, at present, due to consultations or agreements with interested parties, such as Native Americans.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is 99% from surface water and less than one percent from a ground well. Potable water is primarily supplied under a contract with the City of Lawton. The maximum capacity/contracted amount is 12.5 MGD and the average daily usage is 4.0 MGD. The ground well has a pumping capacity of 0.004 MGD and an average daily usage of 0.002 MGD. The installation water treatment plant has been shut down for five years and was due to be back in operation on or about May 1994. The design capacity of the installation treatment plant is 0.05 MGD. The system will allow for 71% expansion, however there are treatment and distribution limitations.

b. Wastewater.

The upgraded National Pollutant Discharge Elimination System (NPDES) permitted wastewater treatment plant has a design capacity of 4.3 MGD. At present, the average daily usage is 2.2 MGD. The new wastewater treatment

plant is designed to last into the 21st Century.

c. Solid Wastes.

A 188 acre landfill exists on the installation with a total remaining capacity of 4,097,520 tons. The estimated useful life is 35 years. The installation is beginning to implement a composting operation, which will reduce the solid waste stream by 50-60% by the end of CY 96, thereby doubling the useful life remaining for the permitted landfill site.

5. AIR QUALITY.

a. The installation is in Environmental Protection Agency (EPA) Air Quality Region VI-EPA, Dallas, TX.

b. The region is in attainment.

c. Air pollution sources are: paint booths, POL dispensing, incinerators, traffic, controlled burns, central energy plant, accidental fires and training mission.

d. The installation has no air emission credits.

e. The installation has identified two major projects; Phase II Vapor Recovery Devices and CFC Training to meet/maintain air compliance.

f. The installation is within 100 km of a critical air quality region, Wichita Mountain National Wildlife Refuge.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is a less than 90 day storage site facility for hazardous waste.

b. Contaminated Sites.

An ongoing assessment to determine contamination has identified 27 active Defense Environmental Restoration Account (DERA) eligible sites. A total of 66 sites are identified on the IAP.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed and 10 capacitors and one transformer were identified and replaced.

d. Underground Storage Tanks (UST).

Out of 226 USTs, 17 are active and 209 inactive. All 209 inactive tanks will be removed by the end of CY 94. A total of 121 above ground storage tanks have been installed to replace USTs.

e. Radioactive Materials and Sources.

Reynolds Army Community Hospital holds a Nuclear Regulatory Commission (NRC) license for medical use of radioactive materials currently used in five areas and two bathroom facilities. The Nuclear Medical Service is scheduled for immediate decommissioning and relocation to the newly built Reynolds Army Community Hospital located in building 4300 (8 - 9 rooms). The installation also holds several NRC and DA licenses for self-luminous sources on captured enemy equipment, analyzers employing sealed sources and unserviceable radioactive items (sights, fire control devices, chemical agent detectors, etc.).

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs are:

	<u>Hunting/ Fishing</u>	<u>Firewood</u>	<u>Agri Lease</u>
FY 92	\$103,700	\$ 4,300	\$1,200
FY 93	\$91,200	\$ 4,900	\$1,200
FY 94	<u>\$92,000</u>	<u>\$ 5,000</u>	<u>\$1,200</u>
	\$286,900	\$ 14,200	\$3,600

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$5,050,000	\$ 0
FY 95	\$ 0	\$ 4,900,000
FY 96	\$ 0	\$ 3,950,000
FY 97	\$ 0	\$ 3,500,000
FY 98	\$ 0	\$ 2,350,000
FY 99	<u>\$ 0</u>	<u>\$ 1,500,000</u>
	\$5,050,000	\$16,200,000

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$5,050,000	\$ 4,900,000
FY 95	\$ 0	\$ 3,950,000
FY 96	\$ 0	\$ 3,500,000
FY 97	\$ 0	\$ 2,350,000
FY 98	\$ 0	\$ 1,500,000
FY 99	\$ 0	\$ 0
	<u>\$5,050,000</u>	<u>\$16,200,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Presidio Monterey -- 06305

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	392
(2)	Cantonment area	392
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	0
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted, however the 1983 Master Plan Environmental Assessment mentioned there are no endangered, threatened or candidate plants or animals found on the installation.

3. CULTURAL RESOURCES.

a. The Historical Preservation Maintenance Manual draft report of June 1992, cites data contained in the Presidio of Monterey Cultural Resources Report dated 1985. Additionally, the Programmatic Memorandum of Agreement between the DOD and Advisory Council on Historic Preservation is the basis for the ongoing study as part of the Historic Preservation Maintenance Manual. The study must still be reviewed by the State Historic Preservation Officer (SHPO).

b. A historic building survey has been completed and 96 buildings contribute to the historic district.

c. Archeological surveys have been conducted and approximately 84 acres have been surveyed, with a total of 112 potential sites identified. The historic site, El Castillo (a.k.a. Monterey Monuments), consisting of six sites has been nominated for listing in the National Register of Historic Places. Archeological artifacts and associated records are currently stored on the installation. A total of 123 acres are unavailable for development. An estimated 42 acres have been set aside as a Archeological District as a mitigation measure during the Master Plan approval process. No new construction or ground disturbance is allowed within this district.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied by contract with the California American Water Company via metered connections. Storage capacity consists of two each 500,000 gallons above ground storage tanks. The contracted capacity is 5.85 MGD and average consumption is 0.4 MGD.

b. Wastewater.

Wastewater is currently treated at the Monterey Regional Water Pollution Control Agency treatment plant. The total capacity of the plant is 29 MGD. The average usage is approximately 0.2 MGD and the Master Plan projection is 2.2 MGD.

c. Solid Wastes.

Solid waste is disposed under contract with the Monterey City Disposal Service. The projected waste generation after the relocation of the Fort Ord Base Operations (BASOPS) staff to the Presidio of Monterey is estimated at 70,000 CY/year.

5. AIR QUALITY.

a. The installation is in the North Central Coast Air Basin.

b. The region is not in attainment for ozone (moderate).

c. There are no air pollution sources reported at the

installation.

- d. The installation has no air emission credits.
- e. There are major air compliance projects/expenditures reported.
- f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

- a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

- b. Contaminated sites.

The installation has identified three Defense Environmental Restoration Account (DERA) eligible sites. A total of eight Installation Restoration Program (IRP) sites have been identified.

- c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and there are no known contaminated transformers on the installation.

- d. Underground Storage Tanks (UST).

Five USTs remain on the installation and are scheduled for removal.

- e. Radioactive Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) or DA licenses for radioactive materials or sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 535,000	\$ 0
FY 95	\$ 0	\$ 387,000
FY 96	\$ 0	\$ 590,000
FY 97	\$ 0	\$ 585,000
FY 98	\$ 0	\$ 530,000
FY 99	\$ 0	\$ 560,000
	<u>\$ 535,000</u>	<u>\$2,652,000</u>

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$2,616,000	\$ 0
FY 95	\$ 0	\$ 565,000
FY 96	\$ 0	\$1,400,000
FY 97	\$ 0	\$ 900,000
FY 98	\$ 0	\$ 900,000
FY 99	\$ -	\$ -
	<u>\$2,616,000</u>	<u>\$3,765,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands



NONSTRUCTURAL ATTRIBUTES

Carlisle Barracks -- 42155

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	402
(2)	Cantonment area	218.7
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	6.3
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. Recreation	177

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted and no Federal nor State listed endangered or threatened species or critical habitats are known to occur on the installation.

3. CULTURAL RESOURCES.

a. The installation has a Historic Preservation Plan/Cultural Resources Management Plan. Comments are obtained from the State Historical Preservation Officer (SHPO) and the Advisory Committee on Historic Preservation (ACHP).

b. A historic building inventory has been completed and there are 104 historic buildings reported on Carlisle Barracks. Twenty-two buildings are listed and 82 eligible for listing on the National Register of Historic Places.

c. An archeological survey has been completed for 90 acres. Two archeological sites have been found to be potentially eligible for the Historic Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied from an installation spring. The pumping capacity is 1.0 MGD and the average use is 0.35 MGD. The spring produces approximately 3.0 MGD.

b. Wastewater.

Wastewater is disposed under contract with the Borough of Carlisle, Carlisle, Pennsylvania. The wastewater treatment plant has maximum capacity of 0.25 MGD and average daily usage of 0.245 MGD. An increase in the average usage will require negotiation for additional plant capacity with the Borough of Carlisle.

c. Solid Wastes.

Solid waste is disposed under a \$148,798 contract with Waste management, Inc. Average daily volume is 4.8 tons/day at a cost of \$85/ton.

5. AIR QUALITY.

a. The installation is in the South Central Pennsylvania Intrastate Air Quality Control Region.

b. The region is in non-attainment for ozone (marginal).

c. Air pollution sources are central heat plant boilers.

d. The installation has no air emission credits.

e. No projects are identified as necessary to meet/maintain air compliance.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is not a Resource Conservation and Recovery Act (RCRA) hazardous waste storage facility.

b. Contaminated sites

An assessment has been conducted to determine contaminated sites. There are no Defense Environmental Restoration Account (DERA) eligible sites identified on the installation.

c. PCB, Asbestos, Lead Paint, and RADON issues.

A PCB survey has been completed and 13 of the 15 contaminated transformers identified have been replaced.

d. Underground Storage Tanks (UST).

There are 25 active and six abandoned USTs on the installation. Fourteen tanks have been tested and the three failed tanks are to be removed.

e. Radiological Materials and Sources.

The installation holds no Nuclear Regulatory Commission (NRC) nor DA licenses for radiological materials and sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs identified on the installation.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$2,584,000	\$ 0
FY 95	\$ 0	\$1,115,000
FY 96	\$ 0	\$ 513,000
FY 97	\$ 0	\$ 264,000
FY 98	\$ 0	\$ 182,000
FY 99	\$ 0	\$ 172,000
	<u>\$2,584,000</u>	<u>\$2,583,000</u>

b. There are no environmental restoration costs requirements at Carlisle Barracks.

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort Leavenworth -- 20395

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	5,634
(2)	Cantonment area	2,461
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	1,359
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	1,814

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has not been performed; however, the Federally listed threatened species American Bald Eagle is reported to occur on the installation as a transient only. It was also previously reported that a 1359-acre wetland area near the Missouri River is a potential habitat for five endangered fish species, two threatened plant species one threatened mammal species, and three other candidate mammals.

3. CULTURAL RESOURCES.

a. Fort Leavenworth has prepared an installation Historic Preservation Plan. The entire installation is considered to be part of a National Historic Landmark district.

b. A historic building survey has been conducted. There are 99 buildings listed and 170 buildings eligible for the National Register of Historic Places.

c. A total of 5,000 acres have been surveyed for archeological sites. One site is listed and 45 potentially eligible for the National Register of Historic Places.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

The source of potable water for the installation is 100% from five wells. The total pumping capacity of the wells is 5.58 MGD, with an average use of 1.2 MGD.

b. Waste water.

Waste water service is contracted with the City of Leavenworth with a contract amount of \$424,000 in 1993. The maximum capacity is 5.45 MGD and average daily use is 2.175 MGD.

c. Solid Wastes.

Solid waste disposal is provided by a \$100,000/year contract with Forest View Landfill in Kansas City, Missouri. Average daily volume is 210 tons/day at a cost of \$11.50/ton.

5. AIR QUALITY.

a. Air Quality Region is the Northeast Kansas Intrastate Air Quality Region.

b. The region is in attainment.

c. Air pollution sources are boilers, emergency generators, petroleum storage tanks and refueling activities, incinerator, hospital laboratory, dry cleaning, shoe repair, blueline production, screen print shop, printing plant, silkscreen printing, pesticides/herbicides, furniture repair, carpenter/wood shop, debris burning, and degreasing operations.

d. No air emission credits are maintained.

e. A major project, Perchloroethylene Recovery Equipment, has been identified to meet/maintain compliance.

e. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit for one hazardous waste storage site, which expires in April 1995. The installation is in the process of renewing the permit.

b. Contaminated Sites.

There are 18 Defense Environmental Restoration Account (DERA) eligible sites (6 at one location) identified by the installation.

c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey is complete and all 35 contaminated transformers identified were replaced.

d. Underground Storage Tanks (UST).

Out of 21 active and one abandoned UST, 21 were tested and none failed.

e. Radioactive Materials and Sources.

A DA license for radioactive materials is held for two sealed sources (Model FA1C, Lead-In-Paint Analyzers).

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs except for the Disciplinary Barracks farm and greenhouse, which only offset operations costs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$2,163,000	\$ 107,000
FY 95		\$1,318,000
FY 96		\$1,060,000
FY 97		\$ 935,000
FY 98		\$ 935,000
FY 99		\$ 935,000
	<u>\$2,163,000</u>	<u>\$5,290,000</u>

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 900,000	\$1,427,000
FY 95		\$1,632,000
FY 96		\$1,043,000
FY 97		\$ 563,000
FY 98		\$3,310,000
FY 99		\$ 680,000
	<u>\$ 900,000</u>	<u>\$8,655,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Fort McNair -- 11605

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	99.2
(2)	Cantonment area	40.6
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	9.2
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	4-mile frontage
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	50.2

b. Air Space.

(1)	Restricted Air Space. (areas not defined)	200 feet
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	Unknown

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has been conducted, however there are no Federal or State listed endangered or threatened species or critical habitats reported to occur on the installation.

3. CULTURAL RESOURCES.

a. The installation has a Historic Preservation Plan/Cultural Resources Management Plan which has been reviewed by the State Historic Preservation Officer (SHPO) and the Advisory Council for Historic Preservation (ACHP). It was previously reported that all projects which may have an effect on historic properties are conducted under a Memorandum Agreement between the Army, the District of Columbia SHPO and the Advisory Council on Historic Preservation.

b. A historic building survey has been conducted; 58 structures were identified as eligible or listed on the National Register of Historic Places.

c. An archeological survey has been completed for all 99.2 acres and 16 sites were identified as eligible for listing on the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Fort McNair receives its water from the Army Corps of Engineers facility, Washington Aqueduct, in Washington, DC. There is no contract limit and the average daily consumption is 0.45 MGD.

b. Wastewater.

The city of Washington, D.C. disposes of wastewater with no daily limits. Average daily discharge is 0.45 MGD.

c. Solid Wastes.

Solid waste removal/disposal is by a \$204,420 contract with Urban Service. The daily volume is 3-5 tons/day at a cost of \$70.00/ton. There are no limitations on volume increases.

5. AIR QUALITY.

a. Fort McNair is in the National Capital Interstate Air Quality Region, District of Columbia Environmental Control Division.

b. The region is in non-attainment; however, the pollutants and their severity were to be determined during the city inspection in June 1994.

c. Air pollution sources are: boiler plant, underground storage tanks, paint shop, and mobile sources.

d. The installation has no air emission credits.

e. An air emissions inventory and permit is required to meet/maintain air compliance.

f. The installation is in a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

Fort McNair is not a Resource Conservation and Recovery Act (RCRA) treatment, storage or disposal facility.

b. Contaminated sites

An environmental assessment determined that there is one Defense Environmental Restoration Account (DERA) eligible contaminated site.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB survey has been completed and seven regulated contaminated transformers were identified, of which five were replaced and two retro-filled.

d. Underground Storage Tanks (UST).

Seventeen USTs have been tested, of which 13 failed. All 17 USTs were removed and eight new USTs were installed.

e. Radioactive Materials and Sources.

The dental clinic holds a Nuclear Regulatory Commission (NRC) or DA license for x-ray equipment. The clinic is under the control of the Walter Reed Army Medical Center, which is responsible for any decommissioning requirements.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

There are no revenue generating programs.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 392,000	\$ 10,000
FY 95	\$ 525,000	\$ 6,000
FY 96	\$ 355,000	\$ 25,000
FY 97	\$ 275,000	\$ 0
FY 98	\$ 315,000	\$ 25,000
FY 99	\$ 235,000	\$ 0
	<u>\$2,097,000</u>	<u>\$ 66,000</u>

b. Summary of restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 0	\$ 150,000
FY 95	\$ 0	\$ 200,000
FY 96	\$ 0	\$ 50,000
FY 97	\$ 0	\$ 50,000
FY 98	\$ 0	\$ 50,000
FY 99	\$ -	\$ -
	<u>\$ 0</u>	<u>\$ 500,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

West Point Mil Reservation -- 36993

1. LAND USE.

a. Land Availability (estimated quantities in acres).
Includes Stewart Army Subpost and Galeville.

(1)	Installation total	17,103
	West Pt	- 16,080
	Stewart Sub-post	- 402
	Galeville	- 621
(2)	Cantonment area	1,524
(3)	Maneuver area	591
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	9,679
(5)	Firing Ranges	2,500
(6)	Non-Impact Firing Range	350
(7)	Wetlands Sec 404 area	1,091
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	3,666
	Recreation	- 3,151
	Water Surface	- 515

b. Air Space.

- (1) Restricted Air Space. All range areas are restricted in July and August
- (2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Less than 1 acre.

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey was conducted by the New York State Biological Survey (7 Oct 93). No permanent resident TES's were identified. During the winter migratory period, the Federally listed endangered Bald Eagle occurs occasionally and helicopter crews are instructed to stay at or above 1000 feet above ground level if possible, and to watch for and avoid contact with Bald Eagles in the areas where observed.

3. CULTURAL RESOURCES.

a. West Point has a Programmatic Agreement with the State Historical Preservation Office. There is a Cultural Resources Management Plan (CRMP) and the installation is in the process of developing a Historic Preservation Plan (HPP).

b. A historic building inventory has been completed for West Point. West Point has a National Historic Landmark (NHL) architectural district and numerous other National Register eligible buildings are scattered throughout the facility. The survey listed 259 buildings as either on or eligible for the National Register. One building is in substandard condition. A memorandum of agreement (MOA) for Stony Lonesome II preserves two redoubts and six hut sites (5 acres). A total of 250 acres are set aside/defined as NHL.

c. An archeological site location model has been prepared for West Point. Approximately one percent of West Point's total 17,103 acres were surveyed to test this model. Approximately 80 archeological sites were found by this survey; many of these are considered to be potentially eligible for the National Register. Historic records show that there are at least 90 potential historic sites at West Point. Additional surveys will be necessary to complete the archeological inventory.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is supplied from surface water sources. Two water treatment plants exist with design capacities of 4.0 MGD and 2.0 MGD. The combined average use is 2.254 MGD. Ongoing work is required to upgrade the plant within the next 10-15 years. The STAS facility is under the control of the Town of New Windsor with the finalized contract being completed.

b. Wastewater.

Three wastewater treatment facilities exist on the installation. The Traget Hill facility has a design capacity of 2.0 MGD, a daily use of 1.5 MGD and a life of 30 years. The Buckner facility has a design capacity of 0.25 MGD, a daily use of 0.1 MGD and a life of 20 years. This facility is only operated from June through September. Upgrading of this facility is necessary. The STAS facility has a design capacity of 0.5 MGD, use of 0.4 MGD. This facility also requires

upgrading and is in the negotiation process of turning it over to the Town of Windsor with all contract data pending. All three operate under a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

Solid waste is disposed of under contract. The contract includes the operation of a transfer station, a range site and a burn site. The average volume of disposal material is 30 tons per day, at an average cost of \$38/ton for USMA, and \$60/ton for STAS.

5. AIR QUALITY.

a. The designated Air Quality Region in which the installation is located is Hudson Valley Air Quality Control Region.

b. The region is a non-attainment area for ozone (severe).

c. Air pollution sources are: powerhouse, incinerator, spray paint booth, dry cleaning plant, welding shop, rifle range, sawdust blower, burn pit, and traffic.

d. Air emission credit status is unreported.

e. Major air compliance projects have been identified to meet/maintain air compliance.

f. The installation is within a critical air quality region.

g. The Central Power Plant is restricted to fuel burning of 5,620,000 gallons per year.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation is in the process of applying for a Resource Conservation and Recovery Act (RCRA) Subpart X permit for open burning of unused propellant from artillery firing. Ongoing discussion with NYS DEC and EPA Region II. The activity is covered by interim status.

b. Contaminated sites.

The installation has identified six Defense Environmental Restoration Account (DERA) eligible contaminated sites.

c. PCB, Asbestos, Lead Paint, and RADON issues.

PCB: A PCB survey has been completed. 28 contaminated transformers have been identified. 14 have been replaced and 14 refitted.

Asbestos: An asbestos management plan survey is on-going in FY 93. Based on the survey results of the first 90 buildings (over 2 million square feet), abatement measures will be performed.

Lead Paint: An assessment survey will take place in FY 93.

Radon: A review of past monitoring activity is in progress. Mitigation and/or additional monitoring will be dependent on the results.

d. Underground Storage Tanks (UST).

There are 250 tanks present of which 100 having been tested. Ten tanks have failed the testing, seven having been replaced.

e. Radioactive Materials and Sources.

Nuclear Regulatory Commission (NRC) Byproduct Material License #31D-02102-02 and #SUB-311 are present. DARA A321-10-01 is also present. All are for small quantities of radioactive materials for use in the education and training of the cadets. Materials are used primarily in Bartlett Hall, 3 to 5 classrooms/laboratories and Washington Hall, Cadet Supply Room with minimum survey and cleanup due to the small quantities of material.

7. OTHER ISSUES, CONSTRAINTS.

No other environmental issues or constraints are reported.

8. REVENUE GENERATING PROGRAMS.

Two revenue generating programs are in place.

	<u>Forestry</u>	<u>Fish/Wildlife</u>
FY 92	\$ 38,000	\$ 90,000
FY 93	\$ 50,000	\$ 8,900
FY 94	\$ 49,000	\$ 9,000
	<u>\$137,000</u>	<u>\$107,900</u>

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$3,058 K	\$4,028 K
FY 95	2,841 K	7,921 K
FY 96	2,661 K	3,461 K
FY 97	2,710 K	2,692 K
FY 98	2,343 K	1,849 K
FY 99	<u>2,352 K</u>	<u>2,060 K</u>
	\$15,965 K	\$22,011 K

b. Summary of environmental restoration costs.

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$ 925 K	\$ 780 K
FY 95	0	\$2,265 K
FY 96	0	\$3,770 K
FY 97	0	\$7,295 K
FY 98	0	\$ 445 K
FY 99	<u>0</u>	<u>\$ 445 K</u>
	\$ 925 K	\$15,000 K

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands



NONSTRUCTURAL ATTRIBUTES

Holston AAP -- 47305

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	6,024
(2)	Cantonment area	39
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area (15 miles of stream)	63
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	3,727

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Exempt from ICUZ contours	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A Floral/Fauna threatened or endangered species (TES) survey was conducted in February 1991. Federal listed endangered species that reported to occur at the installation include the Indiana Bat, Gray Bat, and Bald Eagle. Federally listed threatened species occurring on the installation are Sharp Shinned Hawk and Cooper's Hawk. Nine animal and three plant are listed as Federal candidate species. In addition, 18 animal and 16 plant species are State listed threatened and endangered species occurring on the installation.

3. CULTURAL RESOURCES.

a. The installation has not yet prepared a Historic Preservation Plan/Cultural Resource Management Plan. Comments are obtained from the State Historic Preservation Cultural and Advisory Council for Historic Preservation on a case by case basis.

b. The historic structure report identified 115 buildings as being historically significant, all but one as part of a historic district. All WW II era buildings are reported as potentially eligible.

c. An archeological survey has not been conducted for the Holston AAP. However, one prehistoric archeological site is potentially eligible for listing on the National Register. Many of the installation lands are recommended in the overview as having a high potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is purchased from the City of Kingsport, TN. Water usage is 0.282 MGD.

b. Wastewater.

The installation operates one sanitary treatment plant which has a capacity of 0.75 MGD. Current use is 0.475 MGD and the useful life of the plant is 25 years. No upgrade is required. The installation also contracts sewage treatment with the City of Kingsport Water Department.

The installation operates one industrial wastewater plant with 7.5 MGD capacity and a usage rate of 3.9 MGD. The plant has a useful life of 25 years and requires two upgrades -- nitrate removal and clarifier and pumps.

A National Pollutant Discharge Elimination System (NPDES) permit exists which requires the installation to discharge cleaner than river water. An intake is also used for process/drinking water supply.

c. Solid Wastes.

Two types of solid waste are handled: contaminated and uncontaminated. Contaminated waste consists primarily of explosive compounds. The two landfills (9 acre flyash & 13 acre sanitary) were scheduled for closure in March 1994, however the State has allowed an extension until 1996. It is reported that there is sufficient space remaining for on-site disposal pending the construction of a new landfill. Uncontaminated waste disposal volume was previously reported at 13 tons/day.

5. AIR QUALITY.

- a. Air Quality Region is Eastern Tennessee/Southwestern Virginia 207.
- b. Region is in attainment.
- c. Air pollution sources were previously reported as coal-fired boilers, acid tank vents, process vessel vents, refuse incinerator, and OB of explosive and explosive contaminated wastes. An air emissions inventory is currently underway. Holston currently has 204 permits which will be consolidated into one in Spring 1995.
- d. Installation maintains no air emission credits.
- e. Major air compliance projects have been identified by the installation.
- f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

- a. Use of hazardous materials.

A Resource Conservation and Recovery Act (RCRA) permit was applied for in 1988 and issuance is expected in 1995. Currently the installation has an Interim status permit for treatment of D003 explosive waste by open burning.

- b. Contaminated Sites.

There are 24 Defense Environmental Restoration Account (DERA) eligible sites (open burning areas) identified.

- c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed. Forty-six transformers contain PCBs and are being replaced only as they fail.

- d. Underground Storage Tanks (UST).

The two remaining USTs are scheduled for removal in December 1994.

- e. Radioactive Materials and Sources.

The installation currently holds no Nuclear Regulatory Commission (NRC) nor DA licenses for radioactive material. However, a contractor formerly held DARP 41-01-01 for Tritium, Nickel, and CS-137, which was

terminated in 1985. The contractor is required to fund any related cleanup costs.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	<u>Agri</u>	<u>Forestry</u>	<u>Fish/Wild</u>	<u>Industr</u>
FY 92	\$15,200	\$11,000	\$ 3,000	\$ 315
FY 93	\$15,165	\$ 0	\$10,761	\$ 760
FY 94	\$15,000	\$ 0	\$10,700	\$ 700

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Total environmental compliance cost for FY 94 - FY 99.

Funded: \$5,715,000
Unfunded: \$11,303,000

b. Total environmental restoration cost for FY 94 - FY 99.

Funded: \$814,000
Unfunded: \$16,055,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Iowa AAP -- 19105

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	19,124
(2)	Cantonment area	185
(3)	Maneuver area	N/A
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	N/A
(5)	Firing Ranges	N/A
(6)	Non-Impact Firing Range	N/A
(7)	Wetlands Sec 404 area	191
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	7,876
	Surface water	110 acres
	Shoreline	9 miles
	Streamlines	21 miles

b. Air Space.

(1)	Restricted Air Space.	0
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ). Zones are on-post	N/A

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A survey for threatened or endangered species is currently ongoing by the Nature Conservancy. The Federally listed threatened Bald Eagle is reported to occur on the installation.

3. CULTURAL RESOURCES.

a. An archeological overview and historic structure report were prepared for Iowa AAP in the early 1980's. The installation is in the process of preparing a Historic Preservation Plan. No cultural resource memoranda of agreement has been prepared for this facility.

b. A historic building survey has been conducted and two structures have been identified as eligible for the National Register of Historic Places. Both buildings are in substandard condition. In addition, many of the World War II era permanent and semi-permanent buildings (over 800) may be potentially eligible.

c. Approximately 50% of the installation's lands have been surveyed for archeological resources. Recent surveys have identified approximately 25 potential archeological sites. Much of the unsurveyed lands are thought to have a high potential for possessing archeological sites.

Currently, an estimated 100 acres are not available for development or operations due to cultural resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Water is 100% from contract with the city of Burlington. Maximum capacity is 3.0 MGD with an average use is 0.575 MGD.

b. Wastewater.

Wastewater design capacity is 0.85 MGD with average use of 0.413 MGD. Industrial wastewater treatment is at 7 different sites with a capacity of 0.432 MGD. Three sites are active averaging .036 MGD each. There is a new National Pollutant Discharge Elimination System (NPDES) permit that has reduced limits, and will require further review.

c. Solid Wastes.

There is one seven acre installation owned flyash landfill with a life expectancy of 20 years. Solid waste removal/disposal contracted with Des Moines County with volume of 3,170 tons/year.

5. AIR QUALITY.

a. The air quality region is Burlington - Keokuk GS.

b. The region is in attainment.

c. Air pollution sources are: one coal-fired main heating plant, one natural gas/fuel oil heating plant, three incinerators, and about 50 other sources (i.e. paint/glue booths, explosive processing areas, and generators. All

areas operate under a permit from the Iowa Department of Natural Resources).

d. The installation has no air emission credits.

e. Major air compliance projects identified are the replacement of main heating plant, restoration of existing facilities, asbestos survey, and restoration of asbestos-covered steam lines.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

There are Resource Conservation and Recovery Act (RCRA) Part B permits for five storage sites. The installation is also in the process of obtaining a new RCRA Part B permit.

b. Contaminated Sites.

Thirty Defense Environmental Restoration Account (DERA) eligible sites have been identified.

The installation is on the National Priority List (NPL).

c. PCB, Asbestos, Lead Paint, or RADON issues.

Total of 175 PCB contaminated transformers are being replaced on as needed basis.

d. Underground Storage Tanks (UST).

Out of a total of three tanks all were tested and passed.

e. Radioactive Materials and Sources.

There is one piece of equipment, SUC-1381 DU assembly, that requires a DA or Nuclear Regulatory Commission (NRC) license for radiological materials. The equipment is contractor owned and any required cleanup is the responsibility of the contractor.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	<u>FY 92</u>	<u>FY 93</u>	<u>FY 94</u>
Agriculture	\$538,000	\$569,000	\$617,000
Fish/Wildlife	\$ 13,000	\$ 10,471	\$ 5,000
Industrial	\$ 1,850	\$ 1,850	\$ 1,850
	<u>\$552,850</u>	<u>\$611,321</u>	<u>\$623,850</u>

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Total environmental compliance cost for FY 94 - FY 99 are:

Funded: \$3,696,000

Unfunded: \$11,464,000

b. Total environmental restoration cost for FY 94 - FY 99 are:

Funded: \$2,563,000

Unfunded: \$14,385,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Lake City AAP -- 29405

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1) Installation total	3,935
(2) Cantonment area	5
(3) Maneuver area	0
(4) Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5) Firing Ranges	434
(6) Non-Impact Firing Range	442
(7) Wetlands Sec 404 area	39
(8) Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones. (80 acres of water surface)	1,348

b. Air Space.

(1) Restricted Air Space.	0
(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).	
Zone I is on-post	
Zone II off-post	975 meters
Zone III off-post	96 meters

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

No threatened or endangered species (TES) survey has been conducted. No Federally listed endangered or threatened species are reported to occur on the installation. However, five State listed TES were previously reported as occurring on the installation. The military mission has not been affected by these species presence.

3. CULTURAL RESOURCES.

a. An archeological overview and historic structures report were prepared for Lake City AAP in the early 1980's. The installation does not have a historic preservation plan. No Memoranda of Agreement have been prepared for this facility.

b. The installation reports that virtually all WW II era permanent and semi-permanent buildings (approximately 286) are potentially eligible for the National Register of Historic Places. Limitations to development are that maintenance on facilities must retain the original appearance.

c. Approximately 17% of the installation's lands have been surveyed for archeological resources. One archeological site was found during these investigations. Other Lake City AAP lands are thought to have a moderate potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is 100% well water. The installation has 14 wells with a total pumping capacity of 1.50 MGD. Current use is 1.1 MGD. Industrial water supply is from the same source as potable water.

b. Wastewater.

Sanitary treatment of all wastewater is through a Publicly Owned Treatment Works (POTW). Sewer capacity is 0.85 MGD.

Industrial wastewater treatment is provided through the use of three treatment plants: an industrial plant which has 1.5 MGD capacity and a 0.7 MGD use; a neutralized explosive treatment plant with a 0.36 MGD capacity and a 0.18 MGD use; and a pyrotechnic plant which has a 1,500 GPD capacity and a 1,000 GPD use. The latter two plants each have a life of 30 years. A National Pollutant Discharge Elimination System (NPDES) permit exists for the installation (Permit No. MO-0004880). This permit is only for non-contact cooling water and storm water.

c. Solid Wastes.

The installation uses two landfills and also has a contract waste collector. The two landfills are each 18 acres in size. One is used for construction debris and has a 1,000-ton capacity and has a life expectancy of two years. The other, used for industrial wastewater treatment sludge, is closed.

Solid waste is also disposed of by a \$148,000 contract. The contract (annually renewed) is with Waste Management for Domestic Trash at a rate of 4 tons/day

and a cost of \$142.17 per ton.

5. AIR QUALITY.

- a. Air Quality Region is Metropolitan Kansas 94.
- b. The region is in attainment.
- c. Installation reports 24 air pollution sources, but does not specify types.
- d. No air emission credits are maintained.
- e. The installation does not indicate any projects to meet/maintain compliance.
- f. There are no critical air quality regions within 100 km.

6. HAZARDOUS MATERIALS/SITES.

- a. Use of hazardous materials.

The installation has Resource Conservation and Recovery Act (RCRA) Part B incinerator permit. The installation is in the process of obtaining a RCRA Part B permit for Container storage, explosive storage, and treatment tank.

- b. Contaminated Sites.

There are 35 Defense Environmental Restoration Account (DERA) sites.

The installation is on the National Priority List (NPL). Three sites currently in the Remedial Investigation/Feasibility Study (RI/FS) stage and one in the remedial design stage.

- c. PCB, Asbestos, Lead Paint, or RADON issues.

PCB survey has been completed with contaminated transformers identified.

- d. Underground Storage Tanks (UST).

Out of four active and one abandoned USTs, four were tested, none failed, two were replaced, and one is new.

- e. Radioactive Materials and Sources

A contractor holds a Nuclear Regulatory Commission (NRC) and a DA license for radiological materials. Contractor is funding survey and cleanup of firing range, which is in the process of being decommissioned for depleted uranium contamination. The survey is almost complete and anticipate sand and soil removal for off-site disposal as radioactive waste.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Industrial outgrants of 42 acres produce no revenue.

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Total environmental compliance costs for FY 94 - FY 99 are:

Funded: \$ 2,474,000

Unfunded: \$35,093,000

b. Total environmental restoration costs for FY 94 - FY 99 are:

Funded: \$ 1,725,000

Unfunded: \$20,788,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

Lone Star AAP -- 48305

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	15,546
(2)	Cantonment area	0
(3)	Maneuver area	0
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	0
(7)	Wetlands Sec 404 area	158
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	0

b. Air Space.

(1)	Restricted Air Space. feet over demolition field	2,000
(2)	Extent of Installation Compatible Use Zones (ICUZ) or Noise and Potential Zone (NAPZ). Zones are on-post	

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species survey has not been conducted, however the Federally listed threatened American Bald Eagle was previously reported as occurring on the installation.

3. CULTURAL RESOURCES.

a. The installation does not have a Historic Preservation Plan nor a Cultural Resource Management Plan.

b. A historic building survey has been completed and no structures were identified as potentially eligible for the National Register of Historic places. However, WW II buildings were recommended for evaluation as they turn 50 years old.

c. Approximately 58% (9,017 acres) have been surveyed for archeological resources. Forty-five of the archeological sites discovered by these investigations may be eligible for the National Register. The archeological overview found that there may be 425 potential historic archeological sites on AAP lands. Unsurveyed Lone Star lands were previously reported as having a high potential for possessing archeological resources.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

Potable water is provided by contract with the Texarkana Water Supply Company. Capacity is 7.7 MGD and average daily use is 0.472 MGD. Restrictions to expansion include the need for a new \$500,000 water tower and replacement of water lines in the production acres.

b. Wastewater.

There is one sanitary treatment facility with a capacity of 3.0 MGD and an average daily outflow of 1.5 MGD. There are seven industrial wastewater treatment plants (1 - lead with a 20 GPM capacity, 1 - chrome with a 10 GPM capacity, & 5 - "pink water" with a capacity 170 GPM capacity. All of the plants have a National Pollutant Discharge Elimination System (NPDES) permit.

c. Solid Wastes.

There is a 9.32 acre construction debris landfill with a remaining capacity of 7,500 tons and a life expectancy of 29 years. The Red River Army Depot also uses this landfill which will decrease the useful life. There is a new 68 acre MSWL landfill under construction with a capacity of 1.28 million tons and an estimated useful life of 28 years.

Solid waste is also disposed of via a \$145,000 commercial contract with the Western Waste Landfill. Average daily volume is 18 tons/day at a cost of \$90.16/ton.

5. AIR QUALITY.

a. Air Quality Region is Shreveport- Texarkana-Tyler 22.

b. Region is in attainment.

- c. Air pollution sources on the installation are destructors, high explosives burning ground demolition filed, and vehicle operations.
- d. The installation has no air emission credits.
- e. No major air compliance projects were reported.
- f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

- a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit for hazardous waste storage. The installation is in the process of obtaining a Subpart X permit for open burning/detonation.

- b. Contaminated Sites.

Twenty-five Defense Environmental Restoration Account (DERA) eligible sites have been identified.

Lone Star is on the National Priority List (NPL).

- c. PCB, Asbestos, Lead Paint, or RADON issues.

A total of 133 PCB contaminated transformers have been identified of which 49 were replaced.

- d. Underground Storage Tanks (UST).

There is one regulated tank, which has passed testing.

- e. Radioactive Materials and Sources.

The installation does not hold any Nuclear Regulatory Commission (NRC) nor DA licenses for radioactive materials and sources, however the contractor holds four NRC licenses and five permits for sealed sources. The contractor is required to survey and cleanup for decommissioning purposes IAW 32CFR655.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

	<u>Industrial</u>
FY 92	\$4,000,000
FY 93	\$4,268,000
FY 94	\$4,000,000

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of total compliance costs for FY 94 -FY 99 are:

Funded	\$	0
Unfunded	\$	8,718,000

b. Summary of total restoration costs for FY 94 -FY 99 are:

Funded	\$	4,344,000
Unfunded	\$	11,792,000

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands

NONSTRUCTURAL ATTRIBUTES

McAlester AAP -- 40520

1. LAND USE.

a. Land Availability (estimated quantities in acres).

(1)	Installation total	44,964
(2)	Cantonment area	781
(3)	Maneuver area	4,306
(4)	Training lands designated as sensitive/marginal by ITAMS/LCTA monitoring	0
(5)	Firing Ranges	0
(6)	Non-Impact Firing Range	380
(7)	Wetlands Sec 404 area	150
(8)	Other (Surface water areas; set aside unique areas; i.e., recreation habitat, forests; restricted use areas such as landfills, contaminated sites, safety zones.	39,048

b. Air Space.

(1) Restricted Air Space. Yes, munitions going off at certain times of day.

(2) Extent of Installation Compatible Use Zones (ICUZ) or Noise and Accident Potential Zone (NAPZ).

Zone II	Off-post	20
Zone III	On-post	0

2. THREATENED OR ENDANGERED SPECIES (PLANTS AND ANIMALS).

A threatened or endangered species (TES) survey has been conducted by the Nature Conservancy. Habitats exist for the American Burying Beetle in the Black Jack/Post Oak forest and brush land. A Biological Opinion has not been rendered, however it is reported that the TES population is stabilized.

3. CULTURAL RESOURCES.

a. The installation has no Historic Preservation Plan or Cultural Resources Management Plan.

b. A historic building survey has not been conducted, however, the installation is reported to have over 1,474

structures potentially eligible for the National Register of Historic Places.

c. An archeological survey has been completed for McAlester AAP and a total of 44,965 acres were surveyed. There are 449 archeological sites reported as potentially eligible for listing the National Register.

4. INFRASTRUCTURE ISSUES.

a. Potable Water.

All potable water (and process water) is from a surface water impoundment. There is one treatment plant with a design capacity of 1.5 MGD and average daily usage of 0.7 MGD. The plant was constructed in 1943, however no major problems exist. The installation also supplies potable water to two local communities plus one school district.

b. Wastewater.

There is one sewage treatment plant with a design capacity of 0.95 MGD, an average daily usage of 0.35 MGD.

There is one National Pollutant Discharge Elimination System (NPDES) permitted industrial wastewater treatment plant with a capacity of 0.03 MGD.

c. Solid Wastes.

There is a permitted 50 acre Type IV "Other Industrial Waste Landfill," with a remaining useful life of eight years.

There is also a \$25,844 non-industrial solid waste removal contract with Your Trash Service, Inc. The average daily volume is 15 tons/day at a cost of \$10.20/ton.

5. AIR QUALITY.

a. Air Quality Control Region 188 Southeastern Oklahoma Interstate.

b. Region is in attainment.

c. Air pollution sources are ammunition processing, landfills, boilers, generators, chemical labs, machine shops/safety kleen, fuel handling, wood/paint/print shops,

deactivation furnace, water treatment, pesticides and incinerator.

d. No air pollution credits are maintained.

e. Major projects identified in the A-106 Plan to meet/maintain air compliance are: Air Quality Operating Permit, Air Permit, and Thermal Incinerator.

f. The installation is not within 100 km of a critical air quality region.

6. HAZARDOUS MATERIALS/SITES.

a. Use of hazardous materials.

The installation has a Resource Conservation and Recovery Act (RCRA) Part B permit for a storage facility, which expires in September 2002. The installation is also in the process of obtaining three RCRA permits. The RCRA Subpart O permit for the Deactivation Furnace has an expected issuance of December 1994. One RCRA Subpart X permit for open burning/open detonation expected issuance is June 1995. The other RCRA Subpart X permit for Super Critical has an expected issuance of December 1995.

b. Contaminated Sites.

An assessment has been conducted for contamination. The installation contains 44 Defense Environmental Restoration Account (DERA) eligible contaminated sites

c. PCB, Asbestos, Lead Paint, or RADON issues.

A PCB survey is complete; all 33 contaminated transformers have been replaced.

The installation has an aggressive asbestos program/survey.

The DA/AMCCOM Radon program passed with no failures.

d. Underground Storage Tanks (UST).

All USTs have been removed.

e. Radiological Materials and Sources.

Neither the installation nor the contractor hold any Nuclear Regulatory Commission (NRC) or DA licenses for radiological materials or sources.

7. OTHER ISSUES, CONSTRAINTS.

No other significant issues or constraints are known.

8. REVENUE GENERATING PROGRAMS.

Revenue generating programs and revenues for FY 92 - FY 94 are:

Agriculture - \$108,000
Hunting - \$91,000
Mineral (revenue goes to BLM)

9. PROGRAMMED ENVIRONMENTAL COSTS.

a. Summary of environmental compliance costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$1,907,000	\$ 345,000
FY 95	\$1,435,000	\$ 27,000
FY 96	\$ 0	\$1,123,000
FY 97	\$ 0	\$1,233,000
FY 98	\$ 0	\$ 993,000
FY 99	\$ 0	\$ 803,000
	<u>\$3,342,000</u>	<u>\$4,524,000</u>

b. Summary of environmental restoration costs:

	<u>Funded</u>	<u>Unfunded</u>
FY 94	\$1,007,000	\$2,255,000
FY 95	\$ 0	\$3,270,000
FY 96	\$ 0	\$2,695,000
FY 97	\$ 0	\$2,545,000
FY 98	\$ 0	\$2,545,000
FY 99	\$ 0	\$1,045,000
	<u>\$1,007,000</u>	<u>\$14,355,000</u>

ACRONYMS

AICUZ	Air Installation Compatible Use Zone
ICUZ	Installation Compatible Use Zone
ITAMS	Integrated Training Area Management System
LCTA	Land Condition Trend Analysis
404 Wetlands	Regulated Wetlands